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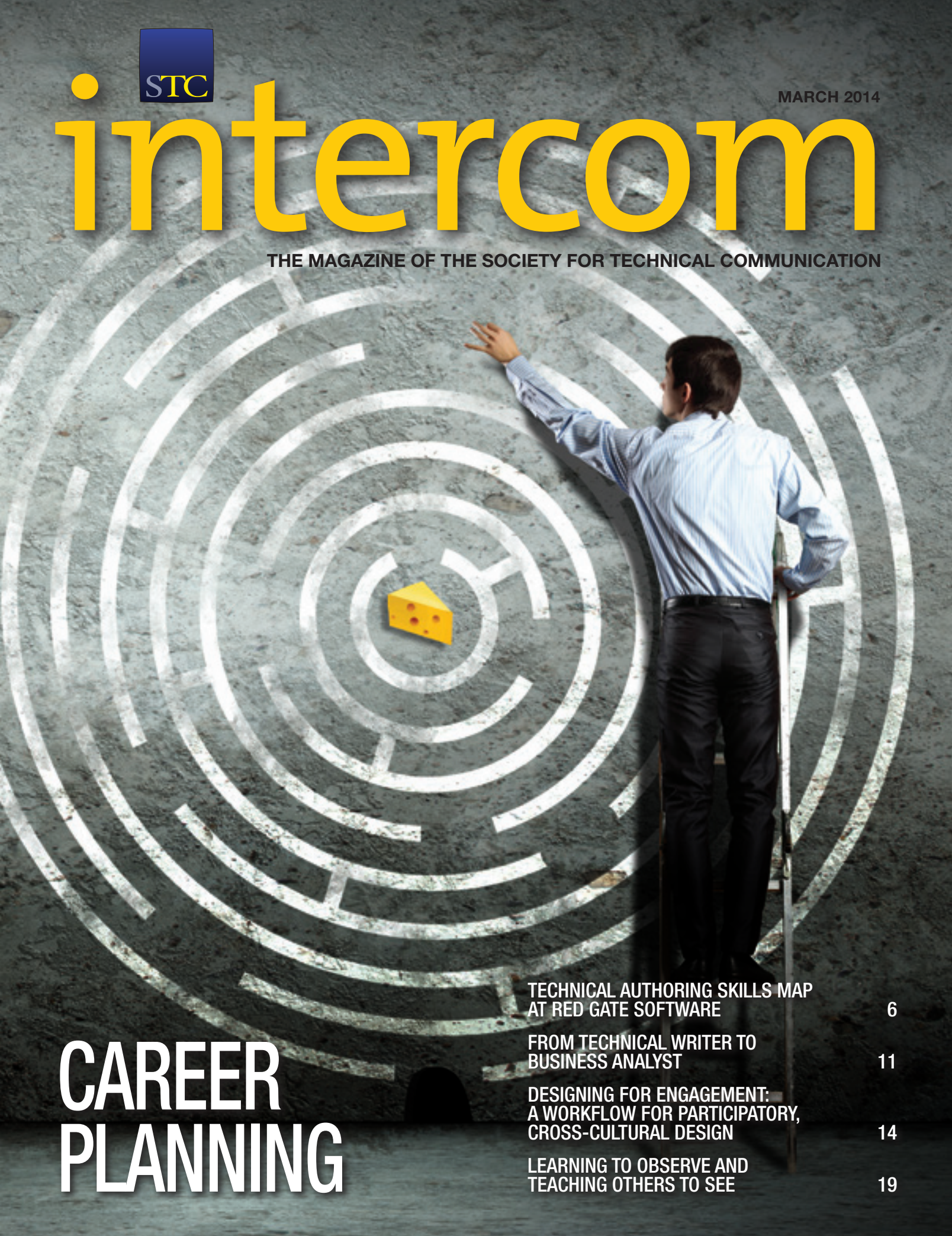

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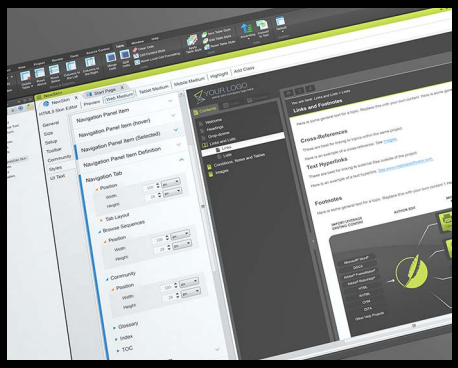

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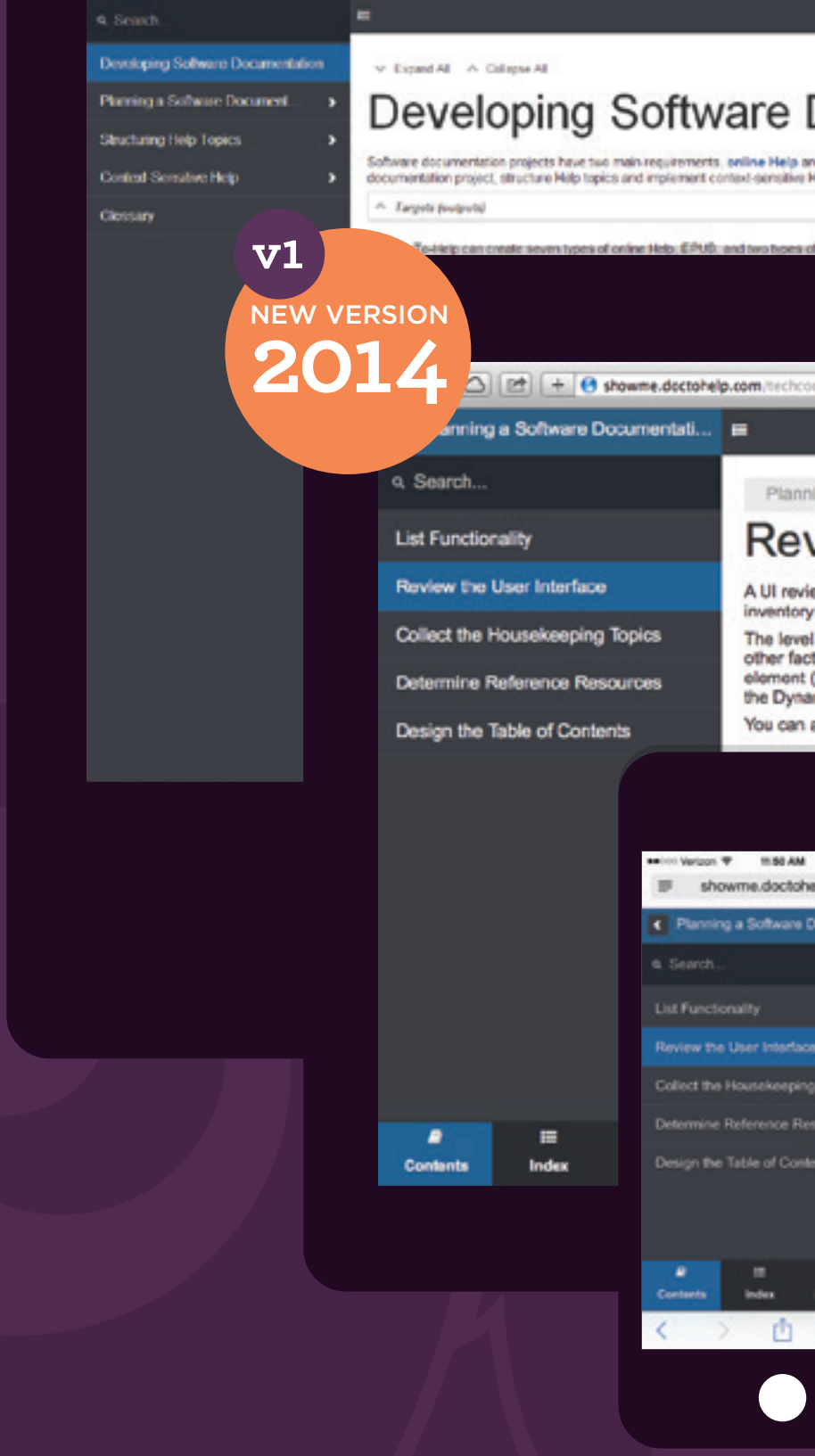

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A Note from the Editor

MARCH *INTERCOM*'S THEME is on career growth and career planning and includes multiple articles on the topic. Brian Harris from Red Gate Software in Cambridge, England, describes his work experiences as a technical author and shares a skills map that Red Gate uses to help with future planning and recruitment. In her article, Amanda White compares the skills of technical writers and business analysts and describes the fundamental differences between the roles and how a technical writer can augment skills to switch hats.

Guiseppe Getto has written an article on "Designing for Engagement," which defines a workflow for participatory, cross-cultural design in user experience. If you're interested in user experience, this participatory workflow is worth considering. In "Learning to Observe and Teaching Others to See," Geoff Hart provides an analysis of two design sources that provide useful tips on how to communicate more effectively. In particular, he tackles the challenge of teaching an audience to look for what we want them to see in documentation. And Nita Beck, a MadCap Flare "fan," has written a thorough review of MadCap's latest release of Flare 10—and the improvements she details are exciting.

The issue also includes two columns—one by Thomas Barker on teaching career planning and preparing students for their next job. STC President Nicky Bleiel has provided the other column—a primer of the essentials on responsive design—an approach aimed at crafting content to provide an optimal viewing experience across multiple platforms and devices.

As always, I hope readers find much to inspire and stimulate them within these pages. If you're interested in writing for *Intercom* to advance your career and build your résumé, please contact me.

—Liz Pohland
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intercom

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Technical Authoring Skills Map at Red Gate Software

By BRIAN HARRIS

MY NAME IS Brian Harris and I have been a technical writer for 15 years.

If you think that sounds like I'm introducing myself at some kind of addiction recovery program, that's not entirely accidental. When you tell somebody you're a technical writer (or a "technical author" or a "tech comm specialist" or a "tech pubs editor" or whatever else happens to be printed on your business card), you are often met with a look of puzzlement.

We have to accept the fact that, unlike software engineers or project managers or salespeople, few people understand what technical writers actually do. That's understandable, because our role is so varied. There isn't really a single definition that covers the sheer range of activities technical writers may be involved with. The nature of the role and the skills required depends largely on the kinds of organization in which we work. I suggest it's the organization that defines the role more than anything else. This is very much the case at Red Gate, the software company where I manage a team of five technical authors.

Before I go on to talk more about Red Gate and the work technical writers do there, I think it would be helpful to give a brief history of my career as a technical author to date. This potted autobiography is, I think, not just a fascinating journey through my life, but illustrates neatly the evolving role of the technical writer.

My Fascinating Life as a Technical Writer

I graduated with an English literature degree from Oxford in the middle of a very bad recession. (Not the current very bad recession, but the one before that.) After failing spectacularly as a teacher (that's a whole other story), I ended up in dead-end, temporary, admin jobs for several years, where I specialized in photocopying, carrying files around, and trying to look busy for eight hours every day.

My final temping job was in 1999 at the National Grid payment reconciliation division on the edge of a housing estate in Nottingham. At the time, as you may have guessed from the year, they were busy doing Y2K testing on their truly ancient and creaking set of mainframe systems. After nine months of carrying some papers around and photocopying, I spoke to one of the contract testers about my career, or lack of it.

"Have you ever thought about being a technical author?" he asked me. "You've got some experience of working in an IT environment, and your background is in English, so you'd be a good fit."

Putting to one side that my "experience" in an IT environment was mostly drinking tea and chatting to people whose jobs I didn't understand, he had a point. So I decided that "technical writer" couldn't be any worse than any of the other terrible jobs I'd unsuccessfully applied for over the years.

My first job came after I answered an advertisement for a technical writer position posted in the *Guardian*. (To date, it is the one and only technical writing job I have ever seen advertised in that newspaper.) The position was with a small software company housed in a mansion built in 1622 in a Hertfordshire town. I can't remember what kind of software they built, and I'm not sure I ever did know. I was based in a dark, musty garret room at the very top of the building working alongside a senior author. My job was to write a user manual for one of the products this company sold and send it to a print shop to return as hard-copy books, which were then shipped with the software. As far as I remember, we only saw the application when it was completed and the manual was very much of the "describe every dialog and option in the interface, in order" school. I occasionally glimpsed software engineers downstairs, but I never once spoke to any of them.

My next job was for a Cambridge company who made intelligence visualization software for Interpol and other police organizations. I was still producing hard-copy manuals (in a much wider range: user guides, quick-start guides, installation guides, reference guides, training material), but now I was also writing a comprehensive set of online help topics delivered in the old-style Windows tri-pane help system. Additionally, I

had to write "What's this?" point-and-click contextual help for every dialog option.

The requirement for detailed online help meant I worked more and more closely with the development team over the years. By the time I left, I was sitting in the same part of the building as the developers, liaising with them from time to time, and even occasionally collaborating with whichever developer happened to be working on the user interface. (This company didn't employ anyone with the specific job title of UX specialist, but they happened to have a few software engineers with experience in the field.)

Technical Writing at Red Gate

And so, finally, I joined Red Gate. There were some crucial differences about my job at Red Gate:

1. Documentation for all the products was online. For years, the hot topic at tech comm conferences had been "should we make our help public on the Internet?" There was a degree of nervousness among some of the more conservative members of the technical writing community, which now seems quaint. Producing Web pages required skills I didn't have and needed to learn quickly: designing content for viewing in browsers, CSS, SEO, Google Analytics, that kind of thing.
2. Most significantly, as a technical author, I was now responsible for every piece of public-facing text in all our products: feature names, option labels, strings, dialog titles, warning messages, embedded help … everything that comes under the rather ugly term of "microcopy." The balance of work had now moved away from writing *about* products to actually building them. I collaborated on all aspects of development with a UX specialist. Between us, we were responsible, with input from the rest of the team of course, for delivering the user experience. I was not just sitting near the project team but was now a fully integrated part of it.
3. The emphasis was on learning about real users as much as the products or technology. We used personas, ran usability tests, watched users struggle to perform tasks in prototypes or early builds, and iterated our designs based on that feedback. I went on site visits, attended trade shows, answered forum posts, and used every channel I could think of to understand our users better.

When I think about what I do now and what I was doing in my first job, there's no comparison. That got me thinking. As head of the tech comm function, one of my responsibilities is to recruit and train authors. The skills that authors need at Red Gate are diverse and far from obvious. It's impossible to infer those skills from their job titles. When we advertise for a "technical author," we have a clear picture in mind of what sort of individual we need, the attributes they should have to succeed, and the activities we expect them to do. Writing is only the beginning. The ability to absorb technical information, empathize with users, and establish a rapport with everyone on their team is just as critical as being able to write succinctly, spell, and use correct grammar. Above all, we emphasize that their job is to "help build usable software."

Career Development for Technical Writers

In late 2013, I joined a team of full-time "functional heads" who were collectively responsible for all aspects of software development at Red Gate—coding, testing, UX, project management, and technical authoring. We quickly decided that the first thing we should tackle as a group was the issue of *career development*. By this point, Red Gate had transformed from a small to a medium sized company without really changing our approach toward career progression. Our CEO's philosophy, "it's your responsibility to manage your own career," became accepted wisdom and an implicit tenet of the company.

As organizations like Red Gate grow, opportunities nevertheless do naturally arise. More teams meant more project managers. More staff meant more line managers. More projects meant more technical expertise. And as time progressed, plenty of people did acquire experience, wisdom, and respect. Across the company, individuals were moved into roles with more responsibility.

So it wasn't the case that there was no career development. There were pockets of excellent practice and a lot of work had been done on improving development discussions and devising a framework for development plans. However, the plans weren't mandatory and were not always offered or requested. Also, the onus was still very much on individuals to drive their own progress. People were given positive feedback in their one-to-ones and occasionally encouraged to write a development plan, so while on the surface all seemed healthy and we were doing some of the right things, in reality we were failing to notice that something was lacking.

In short, we realized that there just wasn't a coherent story about "career development" we could share across the company. So we came up with a number of key aims:

1. **Understand the nature of the problem**
   Rather than conjecture or anecdote, could we gather some actual evidence?
2. **Propose a solution**
   Based on the data we collected, was there a way to address the problems that might actually work?
3. **Implement the solution**
   How could we roll out the changes across the organization in an effective and managed way?

Genesis of the Skills Map

Rather than disappear into an ivory tower to stroke our beards and ponder possible solutions, we had a remarkable insight. *What if we actually asked people what they thought?*

If we took the time to interview everybody within development, to ask candid questions about their own

career and sense of progress, we'd gather some valuable data from which we might actually learn something.

So that's what we did. It took us two weeks to speak to everybody, but it was worth it. After collating and analysing the responses, we were struck by one key finding above all: "Most people didn't have a good understanding of all the options available to them, either for improving in the specific skills their role demands or where their career could go. This applied even to many of the people who said they were generally happy."

In general, people didn't care much about their job titles and few were ambitious to progress vertically into a management role, but the majority felt that feedback in one-to-one meetings with their line manager was "blandly positive" with no specific, constructive advice on what they could learn or improve.

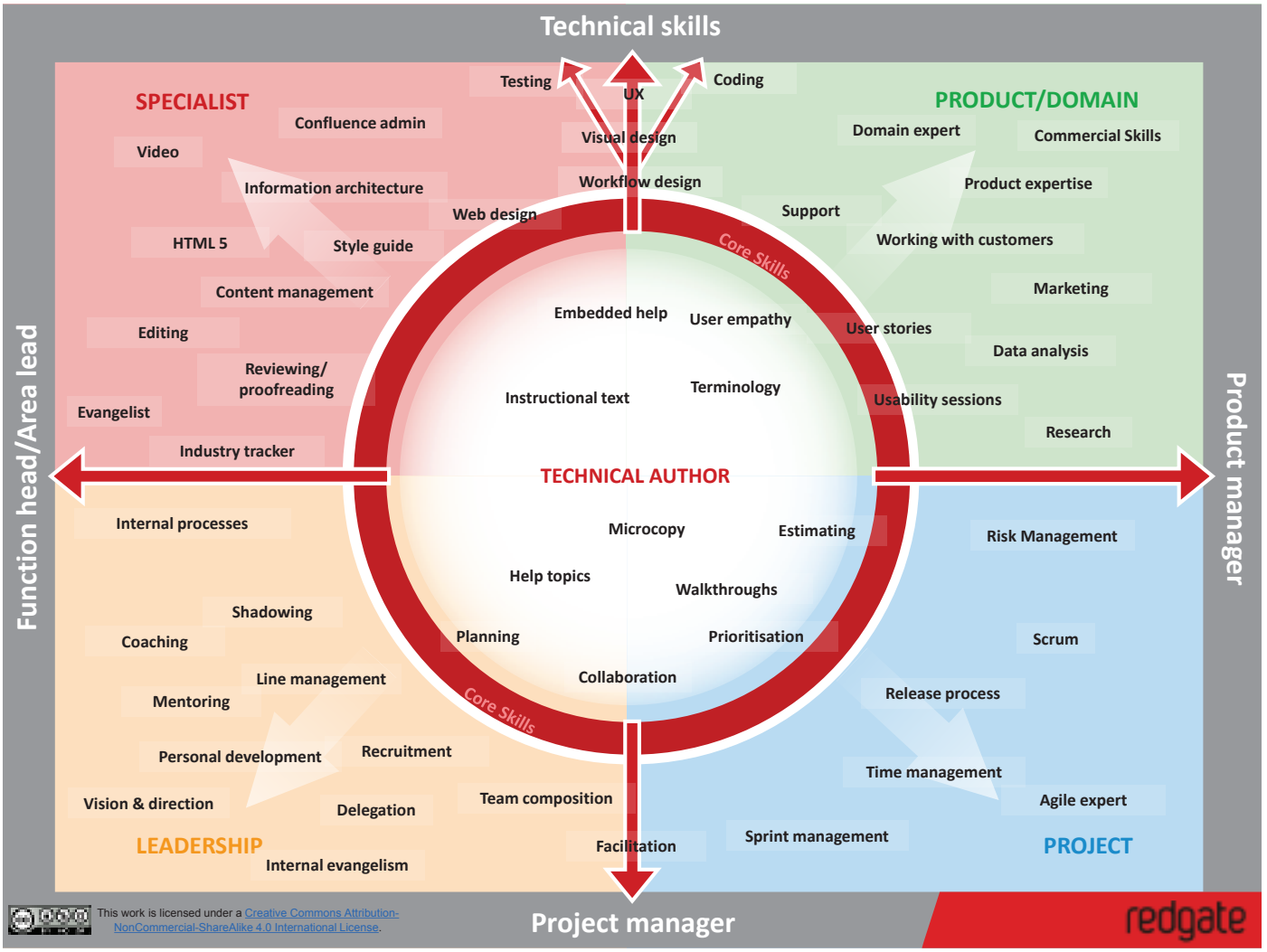
It was obvious that people wanted help understanding how they could broaden their skills and experience. The idea of a simple visual representation of the valuable skills for each role came up in response. We came to call this diagram the "skills map." The purpose of the skills map for Red Gate technical authors is defined as follows:

> To present to authors a visual guide of the range of options that are available to them when they consider the question, "How can I progress as a technical author at Red Gate?"

The primary purpose of the skills map is to facilitate discussion about an individual author's current strengths and future aspirations. (Note that it presents skills and areas of expertise that are most valuable to us as a company at the moment and isn't proposed as a generic guide to technical authoring as a profession, although I hope there is a fair bit of common ground between us and the rest of the industry.)

How the Skills Map Works

The map comprises five regions. The central area contains the core skills and key competencies we expect authors to master before branching out into the other, more challenging quadrants. For new hires, we think this should take about two years. Initially, we didn't include core skills on the map, as it was intended as a vehicle to encourage specialization and career progression, but feedback revealed that it would be helpful to be explicit



My hope is that by making the breadth of skills and attributes required by authors more transparent, it will help to educate thought leaders across various industries that we're more than just writers.

about the basics so authors could understand better what was expected of them and measure their progress.

The four quadrants surrounding the central core represent very broad categories of skills and expertise, and are there primarily to encourage an individual to reflect on where their strengths and interests lie, rather than map out a focused direction of travel toward a different role or job title. These quadrants are:

- **Product**: product expertise, market knowledge, customer research and understanding users; individuals with a commercial bent may gravitate toward this corner.
- **Project**: skills that are related to how projects are run. All technical authors at Red Gate are fully integrated into cross-functional agile development teams, so these skills are all relevant, but some authors want to get their hands dirty running things and coordinating work.
- **Leadership**: skills related to dealing with others, such as recruiting, line managing, coaching, and evangelizing the role of authors and the company.
- **Specialist**: a bunch of stuff that doesn't really fit anywhere else, including technical specialism, ownership of tools or processes, and any area of knowledge or practice where someone might be the "go-to" person in the organization.

The skills map is mainly intended to be used by line managers in personal development sessions to frame the conversation about someone's current skills and as a springboard to discuss career development. For some people, it is a useful visualization of the fact that they are strong across a range of different areas and spread across several quadrants; it can be helpful to explicitly recognize someone as an "all-rounder." Optionally, an individual can assign a value between 0 and 10 for each skill to represent their experience or ability, and produce a rough "heat map" showing their strengths and weaknesses across all aspects of their role.

The skills map can also help with the following:

- **Planning for the future**. It can be updated to reflect technical expertise or domain knowledge that we know will be useful to certain parts of the business. For example, we include HTML5 as a skill in the tech author map, which we know will become increasingly common in developing future applications. We can then encourage members of the team to train in these areas, keep track of whether we have the right mix of skills for the long term, and be confident we're anticipating our development needs for the next few years.
- **Recruitment**. It can be helpful in several ways to show applicants the skills map during the interview process. It explains quite powerfully the diverse nature of the role and the kinds of skills we value; it shows the many opportunities for non-vertical career progression; and it helps candidates assess their current skillset and predilections—for example, whether they are more "project" than "product" people.

It's still early days for us when it comes to using skills maps routinely in our company. Before we roll them out more widely, we want to make sure line managers are fully trained in using them effectively and that there is a reasonable amount of detail backing each skill. It's all very well for an author to say that they are interested in getting better at microcopy or learning more about content management, but without any idea of what these things are or how to develop and practice them, we're not much further forward. So we're producing a guide to each skill, with advice on experts to talk to within Red Gate, books and articles to read, courses to attend, and examples of best practice. This is still a work in progress.

We are also planning to make the skills maps more visually appealing, and in the long run possibly interactive, so that anyone can click on a box to read a detailed definition of what that skill involves.

In the Wider Community

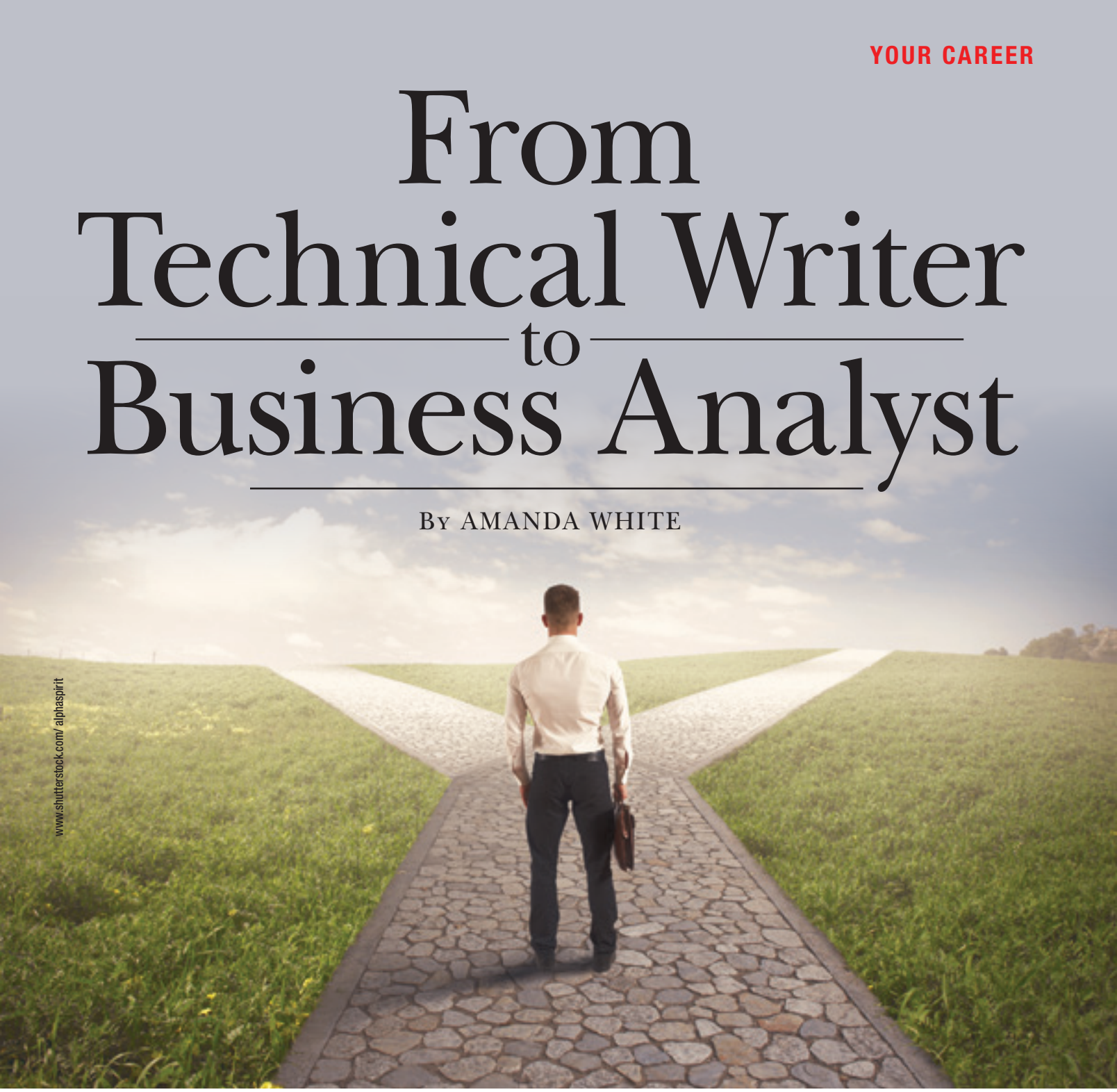
I started this article by writing about how people's eyes tend to glaze over when I describe myself as a technical author. I hope I've explained how the role has changed in my own short career and how it varies by organization. Even at Red Gate, which in many ways has a progressive approach to software development, there are pockets of the business where the role of technical authors is poorly understood. Sadly, I still have to expend a lot more energy than I'd like convincing managers of our value and persuading some of our senior leadership team that we are a necessary and integral part of building great software. I hope the skills map will go some way to helping make that more obvious.

And in the wider profession, I'm pleased to see that the skills map has prompted discussion about our role. My hope is that by making the breadth of skills and attributes required by authors more transparent, it will help to educate thought leaders across various industries that we're more than just writers. And maybe one day, I will confess to someone that I'm a technical writer and they'll say, "Oh, wow, that's cool!" in response. One day.... i

BRIAN HARRIS *is head of the technical communications team at Red Gate Software, based in Cambridge, England. He has worked as a technical author and occasional project manager in the software industry for over 15 years.*

From Technical Writer to Business Analyst

By AMANDA WHITE



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TECHNICAL WRITERS and business analysts use similar skills but in different ways. Here's how to switch hats from one position to another.

When I first told people I was getting a master's degree in technical writing, one of the most common responses I got was, "Oh, you're going to be a business analyst?" To which I had to respond, "A what? I thought I was going to be a technical writer...."

It turns out we were both right. After a few months in my first technical writer role, I was moved to the title business analysis. Also known as a "requirements analyst" or a "requirements engineer," a business analyst is tasked with figuring out what people need their software to do. That may not sound like it has much in common with technical writing, but when you examine both careers, they use similar skills: creating clear and organized documentation of complex systems, communicating between technical and nontechnical audiences, interviewing subject matter experts, and advocating for the user. However, these skills are used in different ways. Here are the differences you will face when switching hats from technical writer to business analyst (or vice versa).

What vs. How

When you're writing user help, you're telling the user how to do something. You're assuming that they already know what it is they want to do. In requirements gathering, rule number one is to concentrate on what the user wants to do and leave the details of how they should do it for later.

There are several reasons for this. One is that it's easy to lose sight of the actual goal of the product when you get bogged down in details. Another is that the people requesting the system are experts on the problem they need to solve, but they are not experts on technology or design. The extent to which you will eventually be involved in the decision and documentation of the "how" depends on the makeup of your team. On a large team, you might just be responsible for supplying and prioritizing the user stories, while on a small team, you might be the primary person responsible for user experience, making design decisions in conjunction with the development team.

Concept vs. Reality

When you are documenting a product as a technical writer, you have the product itself to go by. It's usually more or less complete by the time you get your hands on it. If it is not complete, you at least have something you can put your hands, or your mouse, on. If you want to see how it works, you can click around and push the buttons.

If you're a business analyst, there's nothing to click. You're writing and talking about a product, or a new set of features, that's just an idea. This means that making sure everyone's on the same page, communicating concepts to the stakeholders, and keeping track of what has been decided is an ongoing struggle. Wireframes, use cases, mock-ups, and flowcharts can all help, but there's no quick and easy way to document an abstraction.

Technical Audiences vs. Nontechnical Audiences

The technical writer is usually communicating technical knowledge to less-than-technical people. Business analysis, on the other hand, usually goes the other direction: you will need to transform ideas from nontechnical people into documentation for developers. As technical communicators, our first rule of thumb is "know your audience," and that doesn't change when you're wearing the business analyst hat. What a technical writer may document as "Click the plus icon to add another row," a business analyst may record as "User can increment the fields."

Black Box vs. White Box

When you're writing user help, you only want to include information that will benefit the user. And the user doesn't actually care how the system works behind the scenes—they just want to know what they have to do to get what they want. But when you're writing requirements, you are writing for developers, who most certainly *do* care how the system will work.

A description of a system that only includes outside interactions (usually actions taken by the user) is called "black box," as if the system is painted black so you can't see inside. A description of a system that explains what's going on behind the scenes is called "white box," although "clear box" would be a more accurate term.

For example, a help topic on submitting your address might look like this:

1. In the top menu bar, click Profile.
2. Under Address, enter your address in the text box.
3. Click Submit, and in the confirmation box click OK.

A use case of the same task might look like this:

1. User navigates to profile page.
2. System displays editable user profile.
3. User enters address and submits.
4. System displays confirmation pop-up.
5. User confirms.
6. System adds address to the database and displays confirmation message.

There are twice as many steps in the white box system because for every action the user takes we are also recording the action the program takes.

First vs. Last

Technical writers often join a project just as it's wrapping up. Here's the widget, now document it! Business analysts are the first to touch a project. Before the project technically exists, a business analyst is scoping out the needs and even weighing costs to benefits to see if it should make the queue. Being the first hand in a project means that you have more influence over it. There are various points at which you can contribute to shaping the system under construction, from advising clients on prioritizing features to offering suggestions on enhancements. You may even have a say in the program's design and user interface.

Document as Medium vs. Document as Product

As a technical communicator, the documentation you produce, whether it's a user manual or a tutorial video, is your product. While it's true that the purpose is to communicate information to the user, it's your documentation on which you are judged. To a business analyst, your requirements documentation is your primary deliverable, but what really counts is your ability to capture and communicate requirements. In other words, if you write flawless, fleshed-out use cases that are easy for the developers to understand, but you fail to notice a key business rule, your perfect documentation isn't going to protect you from an angry project sponsor who now has to spend money to change the software. The decrease of importance of documentation as an end deliverable is more pronounced in the world of agile development, where requirements are fleshed out as iteratively as the software itself, thus encouraging "living" documentation.

Whether you are seeking a new career, expanding your role on your current team, or just perusing want ads and thinking "Hmm, could I do that?" business analysis is a natural transition for technical communicators (as is technical communication for business analysts). Retooling your existing skill set for requirements analysis will open up another segment of the jobs market to you and give you more creative influence over software development and the user experience.

Suggested Reading

Thinking of delving into the world of business analysis? Fortunately, your career in technical communication is a good foundation to get you started. But to make the transition, here is some recommended reading:

Brennan, Kevin, ed. *A Guide to the Business Analysis Body of Knowledge*. 2nd edition. International Institute of Business Analysis, 2009. (The "BABOK" is the International Institute of Business Analysis's (IIBA) flagship publication. Use it as a reference or to study for Certification of Competency in Business Analysis (CCBA) or Certified Business Analysis Professional (CBAP) exams.)

Cohn, M. *User Stories Applied, for Agile Software Development*. Addison-Wesley Professional, 2004.

Cockburn, Alistair. *Writing Effective Use Cases*. 1st ed. Addison-Wesley Professional, 2001. (However you gather your requirements, chances are you'll be documenting them as either use cases or user stories. Cohn's and Cockburn's works are classics in their respective mediums.)

Carkenord, Barbara. *Seven Steps to Mastering Business Analysis*. J. Ross Publishing, 2008. (Carkenord's book is a good general introduction to business analysis and covers more elicitation and analysis techniques than documentation.)

Cadle, J., D. Paul, and P. Turner. *Business Analysis Techniques: 72 Essential Tools for Success*. British Computer Society, 2010. (You'll never be at a loss for analysis tools with this book. Diagrams, reports, and analysis methods with handy acronyms are so plentiful that every business analyst is likely to find something of interest.)

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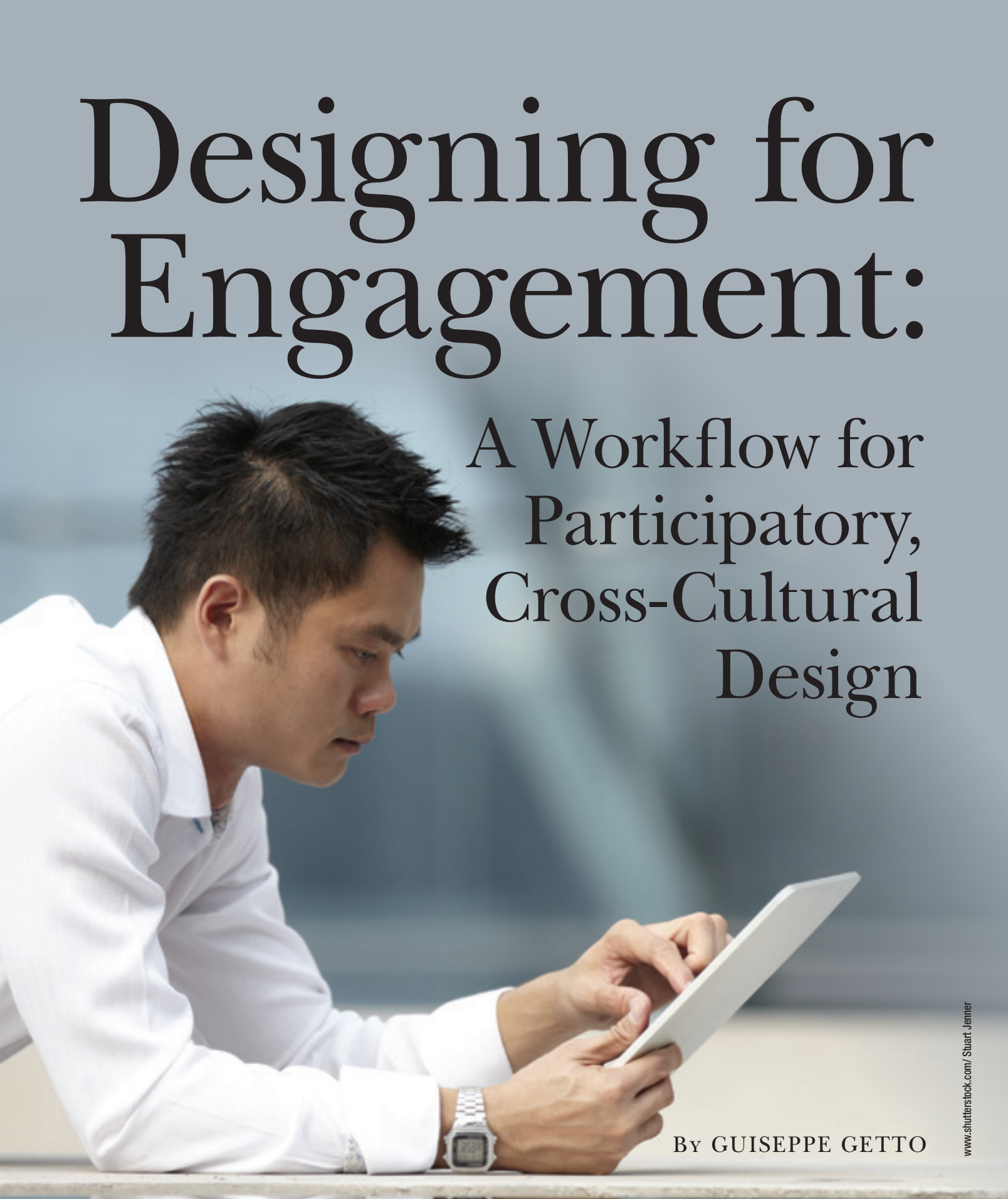
Designing for Engagement:

A Workflow for Participatory, Cross-Cultural Design



By GUISEPPE GETTO

www.shutterstock.com/ Stuart Jenner

WITHIN THE EMERGING field of user experience (UX) design, a shift is taking place in how designers think about users as participants in the co-creation of websites, Web applications, and mobile applications. For several years now, user-centered design (UCD) has been the prevailing best practice. As a key UCD resource (*Understanding Your Users: A Practical Guide to User Requirements, Methods, Tools, and Techniques*) explains, this approach was born out of the need to include users (i.e., the actual persons who would use a given technology) in the actual processes of designing that technology. Such inclusion, moreover, had to be done in a substantive way. This move toward user inclusion was a radical one at the time (over a decade ago), when user experience was often understood in terms of products of the design process vs. in terms of processes that needed to be included within it. And to date, UCD is arguably the most complete and best-understood methodology for including users in the various stages of design—from initial research to prototyping, user testing, and maintenance.

UCD is best understood as a process of requirements gathering (i.e., basic functionality, design choices, level of technical support, aesthetic and linguistic preferences, etc.). Users are interviewed or surveyed during the initial planning stages of a design project. They are also kept in the loop throughout all further iterations of that project, with an eye toward understanding what users require from the design, be that functionality, accessibility, cultural understanding, learning style, language fluency, etc. Once designers understand those requirements, they can create a product or service that meets the needs of real, live users as opposed to designing products for hypothetical individuals who may or may not have expectations that are very different from those that were estimated.

The flaw in UCD is that requirements gathering doesn't guarantee that users will care enough about a design process to substantively participate in it. This has been pointed out by adherents of what is variously called participatory design, inclusive design, formative usability, or my own term—engaged design. As Tomer Sharon argues in his recent book *It's Our Research: Getting Stakeholder Buy-in for User Experience Research Projects*, the true power of user experience methodologies is their ability to cause organizational change. For Sharon this happens at two levels: 1) in the ways users are treated during design processes, and 2) in the ways UX is incorporated into all design work within an organization. Rather than viewing UX as something that simply helps improve products and services for end-users, Sharon advocates a truly collaborative workflow for design projects. This workflow treats both designers within an organization, as well as prospective users of a given product or service, as stakeholders in the co-creation of that product or service.

How To Treat Users and Designers as Stakeholders

Instead of designing a specific usability test or limited-term project with clients, designers like Sharon want to encourage entire organizations to inject UX methods throughout their production cycle. This is known as the UX lifecycle, or processes a design team should go through to ensure a quality user experience. This often involves a UX team working with a design team to help designers understand opportunities to improve UX at each stage of the design process, from initial research to prototyping, user testing, and maintenance.

In my own work, this has meant creating UX deliverables like wireframes, sitemaps, project plans, and business process models (or models for user interaction with a system). I also create these deliverables in formats that are editable so that clients I am working with can continue to perform UX work on their own after the initial project is completed. This not only requires producing deliverables in formats that clients are familiar with, but also inviting them into the knowledge-making practices I am using to create those deliverables. I do this through deep collaboration during each stage of my research, including frequent meetings and invitations to give detailed feedback on key decision points.

Treating users as stakeholders is equally important. Rather than only recruiting representative users for usability tests, it is essential to engage users at a deeper level. Encouraging people who are interested in the product, such as customers using a previous version of a particular application, to get involved in the actual design process is one way to accomplish this. This approach is opposed to showing them prototypes where most decisions have already been made. As a concrete example of this, Eunice Chang and Olivia Williamson, two designers at the firm Autodesk, have piloted adding what they call "customer councils" into their design workflow. Rather than prototyping a design for a product and then testing that prototype, Chang and Williamson ask users of their products to join these councils, which have real power in the direction that prototypes will take. According to Chang and Williamson, members of these councils have gone so far as to use early prototypes of architecture software to design fictionalized "ideal buildings," and in the process have given Chang and Williamson detailed feedback about the functionality, intuitiveness, flaws, and possibilities of their prototypes.

UX in a Global Context

Along with more participatory design processes, UX experts are looking to global markets for users who have previously been neglected by both designers and researchers. Many U.S.–based UX firms are currently working hard to break into international markets by making connections with designers and customer bases in countries like China and India, where tech sectors are just beginning to take off. This focus has included expanding the scope of user research to include international users and stakeholders, as opposed to only conducting research with users who are the same nationality as the researchers. This approach has also included funding trips for UX experts to travel to these countries in order to encounter user lifeways face-to-face.

The importance of this approach, moreover, is appearing in the current research in global/international technical communication. Huatong Sun's recent (2012) book, *Cross-Cultural Technology Design: Creating Culture-Sensitive Technology for Local Users*, is an example of a participatory framework applied in a cross-cultural situation, a case study of six Chinese users of text messaging interfaces. Sun argues that designers and researchers should "localize" research methodologies to specific groups of users and their cultural contexts. For Sun, localization is a "design philosophy that integrates action and meaning in technology design in order to make a technology usable and meaningful to culturally diverse users" (267). Basically, Sun is arguing that we need to go out and actually work with users in culturally diverse contexts if we really want to develop models for doing so. The danger of simply incorporating international users into existing methods is that designers will end up creating products and services that are out-of-sync with the everyday lives of users living in other nations and cultures. Localization starts with understanding the lifeways of users, including value systems and perceptions of technology that are specific to a given culture.

Participatory Design Is Contextual Design

My own experiences with participatory design frameworks have led me to develop my own philosophy: engaged design. I use this term because I want to emphasize the *engagement* process essential to any participatory design project. I believe, for a truly participatory design process to be enacted, designers and researchers need to get involved in the complex lifeways of actual users to the extent that they begin to understand exactly what users' diverse needs and purposes are. Rather than trying to persuade prospective users to perform usability tests they aren't invested in (e.g., through monetary compensation), I advocate locating users whose wants and needs align with the product or service I'm designing. Forged through my experiences designing mostly with nonprofits and community organizations, but also for a hybrid learning environment composed largely of Chinese international students, the key method I have used to engage users in this manner is what UX specialists call *contextual inquiry*.

Contextual inquiry is a process of observing and working with individuals in the actual settings in which they will use the product or service being designed. Rather than interviewing users over the phone or having them come into a usability lab, advocates of contextual inquiry go to where users are, observing them working in their own office or other community setting. (A good, recent sourcebook on this topic is Steve Portigal's *Interviewing Users: How to Uncover Compelling Insights*.) Stemming from ethnographic field methods (i.e., participant observation, taking field notes, video-recording daily activities, photographing participant workspaces, etc.), contextual inquiry assumes that in the fine-grain details of a given user's everyday life lie the best indicators of what kind of design will be successful for them. Because cultural value systems are typically transparent to those who live them, and opaque to those outside of them, learning why users prefer certain technologies, workflows, languages, or venues for performing their work is crucially important to designing effective products for individuals from other cultures. This I know from personal experience.

An Example of Participatory, Cross-Cultural Design

When designing a hybrid learning environment for Chinese international students, my initial prototype of a course website and learning workflow was a total disaster. Students struggled to understand my learning goals, to meet those goals, and to effectively manage all the work involved in the class. After some investigation, I learned that this was in part because my student-users had concerns about writing publicly in Standard Edited American English. They feared their classmates would judge them on their grammar and syntax. Adding to this problem were the culturally embedded knowledge-making practices student-users brought with them to the environment. These practices just didn't mesh well with my initial learning goals. I wanted students to understand that professional writing and communication were increasingly occurring in digital environments, including via social media networks and other websites, but students associated those environments with their home dialects and feared attempting to use Standard Edited American English in them.

Because the course was hybrid (i.e., part online and part face-to-face), it was also necessarily technology-driven. The vast majority of students, however, were unaccustomed to thinking of technology as a tool for school-based communication. Several of the students were avid users of popular Chinese social media sites and celebrity websites, including QQ (a multilingual chat application that allows users to switch between a variety of languages, all within the same platform). Once I discovered this use scenario, I began to encourage students to incorporate technological platforms into their workflow that were similar enough to QQ to help students feel fluent, such as microblogging platforms like Tumblr and Twitter. I also encouraged them to incorporate scenarios they were familiar with (e.g., explaining a passage of text via images from their home country, describing terms that didn't translate well into English, etc.) into the learning environment. These activities included leading brief, in-class workshops on the contexts and usage of these platforms in their home countries.

As I began to hybridize the learning environment in this manner, students appeared more apt to engage with the course material in substantive ways. For example, they began to critique American technology usage vs. Chinese technology usage and visa-versa, articulating the strengths and weaknesses in each culture's use of technology. The entire learning experience itself became one of cross-cultural inquiry into the communication practices and technologies used by learners from both China and the United States. And the main takeaway from the class

became the overarching idea that technologies, and their users, are always already culturally embedded.

UX Design Is Contextual Design

At a broader level, every participatory design process should be an exercise in cross-cultural inquiry, because designers should never assume they have a window into the lifeways of users, especially if those users are from a dramatically different cultural context. Unless the designer is already a close colleague with participants in other cultures, it is essential that the designer get involved with the lifeways of prospective users (i.e., learn what matters to them, what kinds of technology they are already using, how they work on a regular/daily basis, etc.).

There are a variety of ways to achieve this objective:

- **Preliminary research:** longterm participant observation, contextual inquiry, surveys, open card sorts
- **Prototyping:** contextual inquiry, closed card sorts, focus groups, usability testing with a lo-fidelity prototype such as a paper sketch or quick mockup
- **User testing:** contextual inquiry, usability testing with a high-fidelity (i.e., as close to the eventual user interface as possible) prototype
- **Maintenance:** contextual inquiry, focus groups, surveys

You can see from this list that I value contextual inquiry at every stage of design. The value for such inquiry is that it allows a design process to integrate into the everyday lives of users. This means that there is also a greater chance that the product or service delivered will by optimally usable.

Users are complicated people with lots of (often conflicting) needs and values. The more you can learn about them and invite them into the design process, the more you'll learn about the specific, culturally embedded lifeways they inhabit, and the more your design will mesh with those lifeways. Unlike UCD, then, engaged design requires more than just knowledge of user requirements. It also requires engagement with users on a deep, interpersonal level. This degree of personal interaction is essential to getting the information needed to create products that effectively reflect the behaviors and usage patterns of individuals. And when collecting such data, users should be treated as stakeholders in the design process whenever possible, because they are; they will be the ones whose lives will be most affected by design choices. They have the most at stake in the design process, whether they realize it or not.

Within this context, even the word "design" can be misleading. The problem is that it bears the connotation of highly trained professionals with in-depth knowledge of programming or interface development. It connotes individuals who are creating the deep-level infrastructures and mind-blowing new interfaces that digital experiences operate within. Those people are certainly designers, and they are essential to all cultural lifeways that make use of digital spaces and applications, just as an architect is essential to the construction of a new building. As any good architect knows, however, without knowledge of the ways in which a building will be used, and without buy-in from key stakeholders, an initial design runs the risk of working against actual use. Given time, renovation of any design also becomes necessary as user needs change, new materials and technologies become available, and aesthetic choices begin to appear dated.

Engaging Users through Making Knowledge with Them

The overarching difference between UCD and engaged design is the level of dynamism, flexibility, and interaction between users and designers. Within the paradigm of UCD, knowledge-making is retained by designers. While user knowledge is deeply valued within the design process, users aren't necessarily invited into the central knowledge-making practices that run the process. At the same time, there are limits to any methodology, and it is certainly not my intention to claim that designers should already be using a participatory framework. It isn't always practical to invite users into every knowledge-making practice that is central to a given design process. Sometimes there are large knowledge gaps between designers and end users that require a high degree of translation work to help users understand how a design can be useful.

Depending on the level of engagement users will have with specific aspects of a given design, or how different a new iteration of an existing design will be from previous versions, requirements gathering may be enough. It has also been my experience that users don't always have the time or interest to engage in a design process in a deep way. When working in global contexts or with users from international cultures, it is also essential to consider such factors as language fluency, technology preference, and aesthetic choices important to the culture. As already mentioned, designers should never assume that users are coming from the same cultural background as them, so these additional factors should at least be considered whether working with international users or not.

Rather than replacing UCD with something like engaged design, I believe that these methodologies exist on a continuum. Every design process should be centered around users, but the means of engaging users in that process will differ strongly depending on the factors I've described here. I am certainly not claiming that usability testing is no longer essential, for example, or that certain usability tests, such as those that focus on basic functionality, shouldn't be administered with users who are completely unfamiliar with the design. Sometimes it is important to recruit some fresh eyes at a particular stage of a project.

Take-Aways: Culture Matters as Much as Design

If there is one take-away from this discussion, it should be that culture matters in every design process. Design processes should always be messy and localized, because culture is messy and localized. It's not that design best practices don't exist, it's that users often interfere with those best practices. Rather than being seen as a burden on designers, however, that interference should be considered

essential to any design process. If a designer approaches a given situation with set protocols in mind for how the design should respond to that situation, they are already closing off possibilities for interacting with their users.

My design work has largely taken place with user groups that are frequently neglected by large-scale digital product deployments: first-generation college students, non-profit workers who have little experience with technology, ESL users from a variety of cultural backgrounds, etc. In working with these populations, I have learned that best practices often interfere with what people need from a design process. However, the most important skill I have learned, which I suppose could be called a best practice, is to listen more and talk less. I always have lots of ideas for how to meet user needs, but my first job is to listen to how they articulate those needs and to help them help me meet those needs. This kind of reciprocal and reflexive interaction is at the heart of any participatory design process.

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SUGGESTED READING

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Sharon, Tomer. *It's Our Research: Getting Stakeholder Buy-in for User Experience Research Projects.* Waltham, MA: Morgan Kaufman, 2012.

Sun, Huatong. *Cross-Cultural Technology Design: Creating Culture-Sensitive Technology for Local Users.* New York, NY: Oxford University Press, 2012.

"I MET MANY OF MY FAVORITE PEOPLE THANKS TO STC"
"When I first joined STC and started going to meetings, I quickly realized that STC provided some of the best networking and professional development opportunities for our profession. I was coming from working in a veterinary clinic, which is a totally different world, and I didn't have a lot of contacts in technical communication. Today, most of my work friends and some of my closest personal friends are a direct result of being an active volunteer in STC."
Kit Brown-Hoekstra
MY NAME IS KIT BROWN-HOEKSTRA AND
I'M AN STC MEMBER
STC.org/renew

Learning to Observe and Teaching Others to See

"You see, [Watson,] but you do not observe."
—Sherlock Holmes

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By GEOFF HART

FOR THOSE OF US with functional eyes, vision is our primary means of acquiring information about our world. We use our vision every waking moment, but few of us receive training in how to *observe*, probably because things we do without thinking seem easy; we therefore take them for granted. But observing is a learned skill, and one that we can learn. In her book *On Looking*, Alexandra Horowitz tells us of the voyage of discovery that began when she asked a series of unconventional guides to lead her through the process of learning to see: a geologist, a typographer, an illustrator, a naturalist, a wildlife researcher, an urban sociologist, a doctor, a blind woman, a sound designer, and her dogs. These guides saw the same world in surprisingly different ways, both because their training taught them to see details that others missed and because they looked at the world with a different focus.

Although this article was inspired by a forty-minute film about how designer Inge Druckrey teaches her design students (*http://teachingtosee.org/film/TeachingToSee.html*), Horowitz's book provided a very different series of insights. In this article, I'll summarize and expand on some of the key points from both sources, in search of insights into how to become a more effective communicator.

See—then Look Beyond—the Signs

Without training, most of us recognize objects based on the ensemble of their characteristics; when we learn to drive, we learn to recognize stop signs, not to look for eight-sided red objects containing the word "STOP" in white characters, mounted on a vertical stem and positioned seven feet off the ground. Learning to observe begins with an effort to perceive objects as a collection of parts with different properties: these parts have a shape (octagonal sign, linear post) and orientation (vertical), among other characteristics, and contrast with their environment (dark red background versus pure white text versus the green of vegetation). For purposes such as driving a car, these details are irrelevant; only the *gestalt* (the overall message that results from these characteristics) is important. But for designers who want to create such images, the details are crucial.

We can learn about those details through *semiotics*, the study of signs (visual indicators) and what they signify. Learning to observe involves learning to identify the components of an image that convey meaning (the signifiers), then considering how they support specific communication goals. Each goal leads to different visual requirements; for example, a heading must stand out sufficiently from the surrounding text to signify the beginning of a section; headings must therefore be larger and more visually prominent (e.g., darker) than the surrounding text. In contrast, tables must organize information into rows and columns, thereby grouping closely related information and separating it from less-related information; tables must therefore use lines (rules) or white space to provide grouping and separation. As a final example, we know that photographs and drawings attract the reader's attention, but in a screen full of such images, it may be necessary to use movement, color, or their combination to make any one image stand out—or to not use such properties if we want to prevent a less relevant image from standing out.

Knowing the properties required by communication lets us choose among various design options that can provide those properties. One good way to learn these options is to choose a visual topic (e.g., color, negative space) and devote a few minutes daily to examining your surroundings in terms of that property. For example, place a glossy commercial magazine beside a user manual and compare their typography and use of white space; list the commonalities and differences between these elements. Why did the magazine designer choose one approach and the technical communicator choose another? How did this choice affect your impression of the page and your ability to read it? When you can make these distinctions, try explaining them to colleagues; the best way to learn whether you truly understand something is to try explaining it to someone else. If you can't explain because you or your audience or both lack the right vocabulary, demonstrate.

The modern world is cacophonous, so it requires discipline to focus this closely and avoid distractions. Finding a peaceful, quiet place away from the hubbub can help. But even when you can't escape the hubbub, creating some physical distance is still useful. For example, you can deconstruct a page layout by taping it to a wall and gradually moving away until only the largest and most dominant objects remain visible; move closer when you're ready to try detecting the details that combine to create these objects. (You can achieve the same effect with an online document by changing the zoom level.) One thing you might not immediately notice is how our expertise with computer monitors and printed pages leads us to define things by edges and boundaries, when in fact the world is a much larger, open-ended place. The unbounded possibilities that lie outside the screen or page can be both intimidating and liberating; you can't think outside the box if you don't know the box exists. And the world outside that box provides important context for the broader environment in which we use the box. Explicitly seeing that world reminds us that the context in which people use our information may be as important as the information itself.

Note that the opposite is also true: you can zoom in on the smallest elements or crop an image by changing the window size until only a subset of the elements is visible, thereby making it impossible to see the larger elements that contain them. Though you lose the overall context, you obtain a clearer image of the smaller context of a specific situation.

Jacques Bertin's classic book on the semiology of graphics provides a thorough immersion in the "visual grammar" that defines how images convey meaning. It's pricey and not widely available, but you should be able

to obtain a copy through interlibrary loan. I've provided some more accessible suggestions in the bibliography. My series of information design articles in *Intercom* (*www.geoff-hart.com/articles/bibliography.html#design*) also provides a good starting point for exploration.

Assemble the Elements to Create a Message

Once you develop skill dissecting the goals that an image must accomplish and the component parts that let you achieve those goals, you can begin crafting your own visual messages. Journalists use the five W's to learn the important aspects of a story, and the visual equivalent is equally helpful:

- Why was the message created? (message)
- Who should receive this message? (audience)
- What aspects of the image provide context for the message?
- What aspects provide the message? (signifiers)
- Where do these aspects appear? (spatial and temporal relationships)
- When should each element be examined and interpreted? (sequences)

You can deconstruct images in other ways; the power of the five W's is that it's so familiar and therefore so easy to apply in a range of contexts.

Answering these questions lets you define the elements of an image you can use to convey a message; in so doing, you take what was formerly implicit (unseen) and make it explicit. For example, once you understand how layering works, you can use objects in the foreground to obscure objects in the background, thereby creating a sense of depth and order. You can break even the most complex images into simple elements. What could be simpler than a dot? Yet dots can create the complexity of a photographic halftone (*http://en.wikipedia.org/wiki/Halftone*) or pointillist art (*http://en.wikipedia.org/wiki/Pointillist*). Lines are only slightly more complicated, yet they provide similar potential for complexity; consider, for example, the art of engraving (*http://en.wikipedia.org/wiki/Engraving*). Line drawings can communicate almost anything a photograph can convey, particularly when combined with dots to provide texture.

When you look for meaning in an image, your thought process changes from defining what things are (e.g., dots versus lines) to understanding their function. One line may define the boundaries of an object, another may pass behind that object to imply depth (layering), and yet another may connect an image to a complex group of lines (the characters in a typeface) that represent text, allowing us to join the visual part of an image to its explanation. Learn to consciously ask and answer questions about the elements of an image: what do you see, what does it mean, and how can you confirm your interpretation? It won't take long before you begin doing this without much thought for simple images, and eventually apply the technique to complex images. Then you can try the more challenging task of asking how you feel about an image and why. Images have an important emotional content, and you should never ignore your gut reaction; how you feel about an image determines how you respond to and interpret it. (I once chose not to purchase a book that I wanted to read because the typeface was so cramped and fussy I knew it would ruin my reading experience.)

Although the distancing and focusing techniques I described in the previous section are useful, neither should blind you to the things that become visible or invisible when you change focus. A trivial example would be determining the best way to convey the visual characteristics of a button or dial on a camera, while remembering to preserve clues to that gadget's position on the camera. This is part of a larger process: asking yourself which elements an image requires and which can be eliminated without loss of meaning (i.e., *abstraction*). You can learn this skill by comparing a photograph with a line drawing of the same image; listing the elements of the photo the illustrator omitted reveals which elements of the image (those that remain) are important. When you examine an image, your first impression often reveals which details your subconscious mind prioritized. Recognizing how these elements drew your eye lets you use the same technique to create emphasis in your own designs.

Understanding these processes reveals why visual consistency is so important: once your eye learns to look for specific visual elements or patterns, all similar objects stand out, making it easy to look for them. This is why the typeface, type size, and type format in a well-designed map are scrupulously consistent, as are the line patterns, sizes, and colors. Once you learn the visual conventions, you can search for specific combinations of visual characteristics to easily find highways while ignoring smaller roads, or vice versa.

Learning to Observe

The human eye moves around subconsciously, constantly refocusing on different parts of the visual field and seeking meaning. This is why we can identify headings without consciously looking for 14-point Arial Black text. Learning to observe requires us to change what is initially subconscious into a conscious act: we must learn to move our eyes around an image in search of its component elements. With practice, that process becomes subconscious once more, and we can instead pay attention to the gestalt rather than the elements that created it—but we can consciously examine the individual elements again when we need to learn how the gestalt was created.

Remembering how we learned to write provides a clue to how you can learn to observe. Initially, we learn to combine multiple strokes of a pen to create an individual letter. Next, we learn to fit letters between the ruled lines in a notebook, which teaches us how to make all letters the same size, how to combine them into words and sentences, and how to estimate the number of letters that will fit on a line. Initially, these difficult acts of spatial perception and planning require intense focus, but as adults, we do this with little conscious effort. We tend to think of the subconscious as

something separate from our self, but really, it's just another aspect of who we are. Like any other skill, using it improves with practice focused on the key elements of the skill.

Learning and practice change how we see the world. Wendy Smith, writing in *The American Scholar*, notes how the best novels teach us new ways to see the world. In turn, as we age and acquire experience, we learn to see the novels in a new way. (This is also true of nonfiction.) The cycle repeats each time we reread a book, increasing the depth of our understanding of the book and the parts of our world it describes. We can achieve that effect in technical communication by returning to some of the seminal works that we've read in the past, or by reviewing designs that we like to determine what we've learned since the last time we did this: are the old design tools still effective, or have we learned something new that will let us improve the communication? By striving to improve the communication, might the context teach us better ways to present information, or might the information teach us something new about its context?

Teaching Others to See

One particularly interesting challenge is how to teach our audience what they should look for when they use our documentation or the products that it documents. Researchers have shown that when an expected or sought-after image is absent, we have a harder time seeing the image that is actually there. This is not a mere theoretical curiosity. As Bialic and McLeod, writing in *Scientific American*, remind us, "if you already think you know the answer, you will not judge the evidence objectively. Instead you will notice evidence that supports the opinion you already hold, evaluate it as stronger than it really is, and find it more memorable than evidence that does not support your view." This phenomenon can literally blind us to other things we could or should be seeing. One thing Horowitz's book made clear to me is just how differently people see the same world; it reminded me that few of my readers will look at the things I'm describing from my perspective and that sometimes I'll need to explicitly teach them what I want them to see.

A typical example for technical communicators might be when a software interface changes between versions, as in the case of replacing the familiar text-based menus of Microsoft Word with the (initially) hated ribbon interface. The largest problem was not that the ribbon was inherently harder to use, but rather that Microsoft made no effort to provide users of the software who expected menus with a clear transition to the radically different ribbon interface. Preserving the menus and supplementing them with a wizard or an online tutorial that showed how the old menus mapped to the new ribbon would have eased the transition to the new interface.

Researchers have shown that when an expected or sought-after image is absent, we have a harder time seeing the image that is actually there.… This phenomenon can literally blind us to other things we could or should be seeing.

Want to learn more about how to observe? Scott McCloud provides a great starting point in *Understanding Comics*. Want to learn more about how to create? John McWade of *Before and After* magazine (*www.bamagazine.com*) provides brilliant lessons in how to think visually and construct elegant but highly functional designs. These lessons will give you the vocabulary and the cognitive tools to think about the characteristics of effective design, discuss them with experts, and perhaps even begin creating effective designs yourself. Though I can barely draw a straight line in graphics software, I've learned how to talk the talk and explain what I need to accomplish so that when I work with designers, we can work together productively. And increasingly, practice lets me accomplish the same results myself.

GEOFF HART *is an STC Fellow with more than 25 years of experience as a writer, editor, information designer, and French translator. He has published more than 400 articles, most available via his website (*www.geoff-hart.com*), as well as the book* Effective Onscreen Editing. *A popular speaker at the STC annual conference and STC chapter meetings, Geoff has given presentations and workshops on topics ranging from writing and editing to information design, cross-cultural communication, and workplace survival skills. He currently works as a freelance French translator and scientific editor, specializing in authors for whom English is a second language.*

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MadCap Flare 10: A Fangirl's Cut

By NITA BECK | *Senior Member*

www.shutterstock.com/ Zora Rossi

WHEN MADCAP SOFTWARE invited me to review the upcoming Release 10 of its flagship product, MadCap Flare, I was honored and delighted. Anyone who knows me knows that I'm an unabashed fangirl of Flare and regularly try to assist my fellow "propeller-heads" in the Flare community.

I've spent the last several weeks banging away on beta versions of Flare 10. To jump-start my research, I started with the "What's New" topic in the Flare 10 Help system, and proceeded from the top to discover the close to 100 new and enhanced features awaiting Flare 10 users. I tried as many as I could in preparation to write this review.

But this is my review, not MadCap's, so rather than begin with the features that MadCap considers the major new ones, here's my director's cut, or—if I may—my *fangirl's cut* of the best of MadCap Flare 10.

Many Print Enhancements

With a variety of new features, enhancements, and fixes, Flare 10 will delight those users tasked with producing professional-grade print documents. Here are just *some* of those enhancements:

Support for OpenType fonts. Until now, Flare did not support OpenType fonts due to limitations in the .NET platform on which it runs. This limitation stymied many users, myself included, seeking to use their companies' and clients' corporate fonts that happened to be OpenType. Some sought workarounds by creating TrueType versions of those fonts, while others compromised by using some less-than-ideal TrueType fonts that came within spitting distance of the OpenType fonts. With Flare 10, we've been unleashed! Need to use Myriad Pro in your print output?

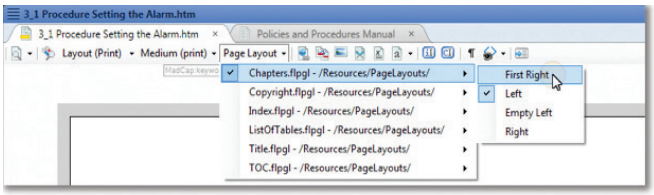
Want to use a Google font? Go for it! Not only do the OpenType fonts render correctly in output, but they are also supported in the XML Editor.

Frame rotation and frame breaks. Would you like to set your chapter headings to run vertically along the page rather than horizontally? For PDF, XPS, and XHTML output, Flare 10 lets us rotate frames in page layouts and, with the new frame break feature, precisely specify which content appears in those rotated frames.

Convert spot colors to black and white. Flare 10 offers a new PDF option for converting spot color—which includes font color and background color, but not color images—to black and white. This is a quick way to produce a PDF that does not contain color without having to alter styles.

Convert straight quotes to smart quotes. No more ugly straight quotation marks in our output. Although this new option doesn't apply just to print, it's in print where I think it'll matter most.

Select a page type to view while editing. Previously, while working in the XML Editor, we could switch to Print Layout mode and select a page layout, but not a specific page type within that page layout. To see how content would look in print, we had to run a test build. With Flare 10, we can select a specific page type from the XML Editor's toolbar to see how content will appear in print, as we edit it.



Selecting a specific page to view while editing

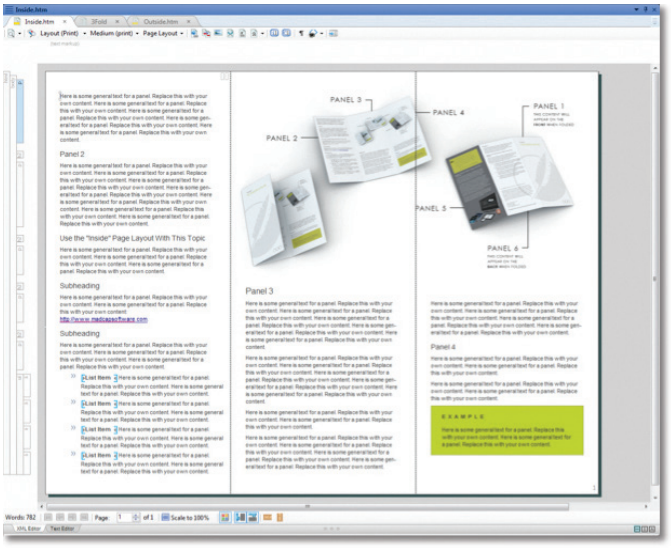
Auto-generation of TOC, index, and glossary proxies. For those of us who have poured our energies into creating online Help only to receive an urgent request to produce a PDF ASAP, Flare 10 offers this useful shortcut: it can automatically inject TOC, index, and glossary proxies into print output, without our needing to add topics to hold those proxies.

There are more print enhancements, but I want to move on to something I consider really big.

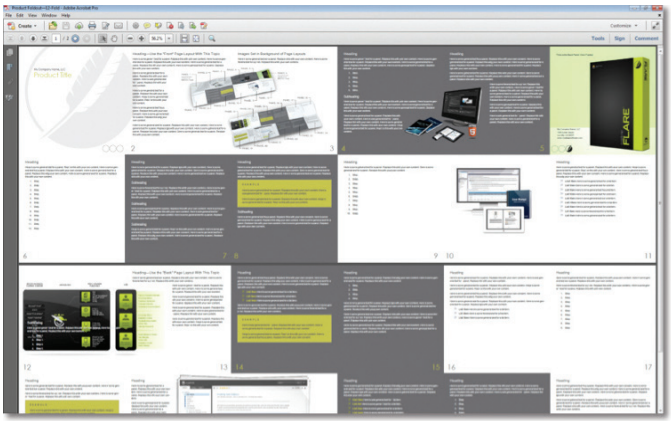
New Project Templates

Flare 10 offers a large collection of project templates, as compared to Flare 9 with six project templates. Many of these templates are an extension of the print enhancements, and I think they are hidden gems. (And I hope MadCap prominently announces these new project templates.)

The new print project templates are designed to produce 3- and 4-fold brochures, an advanced policies and procedures manual (including auto-numbered sections), an advanced user guide (including auto-numbered chapters and appendixes, with new page layouts), and 3-, 4-, 5-, 6-, and 12-fold product foldouts. For each of these print samples, there are actually two targets: one with and one without crop and registration marks.



The 3-fold brochure sample, as viewed in the XML Editor



The 12-fold product foldout, generated as a PDF

I especially like that the brochure and foldout templates include images that show how the panels lay out in relation to the folds. Speaking only for myself—a decidedly verbal, not visual, author—having these images to study is extremely helpful.

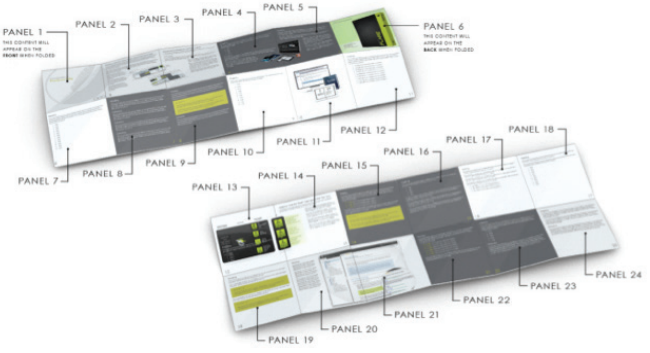
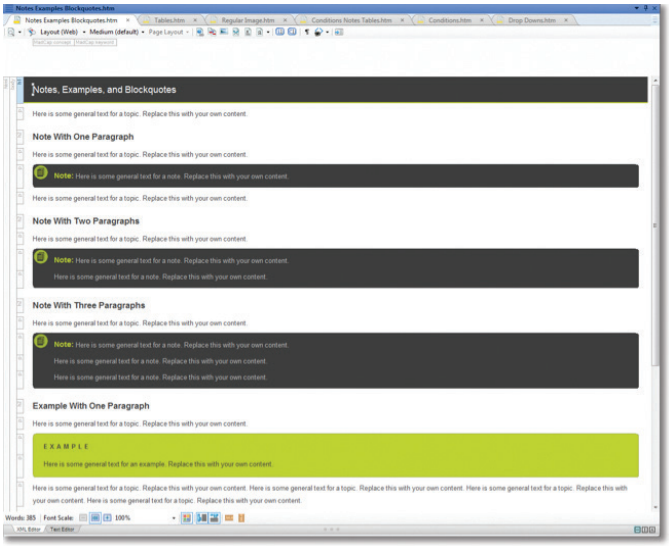


Illustration of the panels and folds in a new print project template

Flare 10 also offers several new online project templates. Each includes sample topics that describe and illustrate some particular content treatment. For example, there are "Image" topics showing different techniques for placement of images, a "Tables" topic with examples of tables formatted with different table stylesheets, and a "Notes Examples Blockquotes" topic with examples of those specialty bits of content.



"Notes Examples Blockquotes" topic

One might quibble that the sample targets in the Flare 10 project templates are all branded with MadCap colors, images, and styles. I think that's fine. They are meant to be examples, and I'm confident that Flare 10 users will glean a lot of ideas from them.

As a "lone author" who rarely has an opportunity to work with a graphics designer, I appreciate the time and considerable effort MadCap expended to produce these rich new project templates. I look forward to learning new tricks from them and to offering new documentation options to my clients.

New Features for Online Output

Flare 10 boasts three major new features for online output: Eclipse Help, Responsive Output, and Slideshows.

I'm not going to cover Eclipse Help, as I think that's a specialty output type that a subset of Flare 10 users will need. (Besides, this is my fangirl's cut, and I've never had a request to produce Eclipse Help.) But the other two features will get wide play among the Flare community, I believe.

Responsive Output

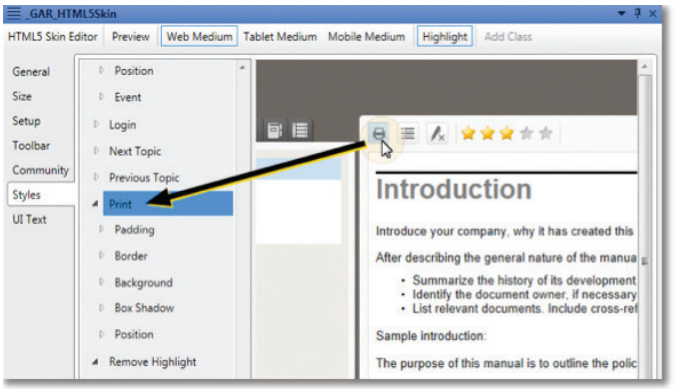
We all know that the day is coming—if not already here—when our online output will need to work well not only on a desktop but also equally well on tablets and smartphones. How can we ensure that the presentation of our online content can adapt to the size and type of device on which it is displayed?

Enter Flare 10's Responsive Output option for HTML5.

To implement responsive output, we do two things: Enable the Responsive Output option in the HTML5 skin and then edit styles in the skin.

MadCap has totally overhauled the Styles portion of the HTML5 Skin Editor, showing us—and letting us interact with—the skin as we edit it.

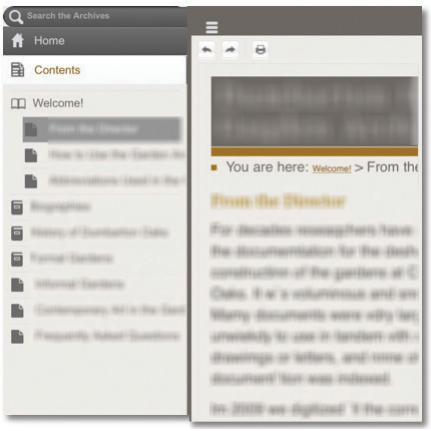
Clicking an element in the skin causes Flare 10 to jump to the corresponding style where we can customize that element. For example, if we want to change something about the Print button, we click the button to have Flare 10 jump to the Print style in the editor. This interactivity works in reverse as well; selecting a style at the left highlights that element on the skin.



Clicking an element on the sample skin jumps to the associated style

The revamped HTML5 Skin Editor also supports three mediums: Web, Tablet, and Mobile. These give us a great deal of control over how our HTML5 output will render on each device.

So what does "responsive" HTML5 output—as compared to plain old HTML5 output—look like? The main difference is that instead of seeing the standard tri-pane interface on a tablet or smartphone, we initially see only the content pane. Tapping the Navigation button slides the navigation pane into view. Tapping an item on the navigation pane slides the content pane back into view.



Responsive HTML5 output on an iPhone

I found modifying the tablet and mobile mediums in one of my existing HTML5 skins to be quick and easy. Happily, I didn't have to do much at all to have the output look good on my tablet and phone.

Slideshows

For many years, Web designers have included slideshows (also called sliders) in their websites. A slideshow typically offers a gallery of images or videos (although may include other content as well) that users can navigate through—or passively view—one after the other.

With Flare 10, we can easily add slideshows to our online output.

When we insert a slideshow into a topic, Flare 10 gives us two placeholder slides to get started. Then it's easy to add more slides, add captions to them, and rearrange them as needed.

Slideshow example
Slide 1
Delete this text and replace it with your own slide content.
You can place almost any kind of content into a slide, including text, tables, snippets, images, multimedia, and more.

A placeholder slide in a slideshow, in the XML Editor

We can also define the slidehsow's autoplay, loop, and navigation controls, and decide whether to show a series of either clickable bullets or thumbnails beneath the slideshow panel.

Slideshow example
Slide 1
Delete this text amd replace it with ynur own slide contemt.
You can place almnst any kind of contdnt into a slide, inckuding text, tables, rnippets, images, muktimedia, and more.

The same slide in generated online output

Honestly, I would have loved to have had Flare 10's Slideshow feature at my disposal several years ago, as it would have been perfect for a client's project, which involved galleries of thumbnail images. The effect that then took me a lot of experimentation would have been extremely easy to accomplish with Flare 10 slideshows.

Export Project

Flare 10's new Export Project allows us to extract bits of a project and create a new, separate project. The export options are by file tag, by conditions, or by target. I'm going to focus on the "by target" scenario.

A typical use-case is to send all the files associated with one target—but not another—out for translation. With older versions of Flare, there was no easy way to do this. One approach was to send the entire project to our translation vendor, with detailed instructions about which files to hit and which to ignore. Another approach was to send a copy of the project from which we had manually removed everything that did not need translation. Either way, it was a lot of work.

> When you finally get your hands on it [Flare 10], I suggest you read—thoroughly—the What's New material, and then play!

With Flare 10's Export Project feature, this process is greatly simplified. We can select a specific target that we need translated, and Flare 10 exports all of the associated files needed to build that target: topics, snippets, master pages or page layouts, style sheets, skins, TOCs, and so forth.

Although I think the Export Project feature is quite handy, and I can certainly foresee circumstances when I'll use it (such as to break up a large project into smaller projects), I think it would be improved if we could select more than one target.

Consider this use-case: Assume we have a project that supports Product A and Product B, each with targets for a Help system, a quick start guide, a reference guide, and a brochure. When it's time to get Product A's documentation translated, we would want to select all of the Product A targets. As implemented in Flare 10, the Export Project doesn't give us that option. Still, it's a great new feature, and I'm sure it will mature.

Review Package Improvements

A source of irritation for my Flare- and Contributor-using clients and me is that none of the snippets were ever directly editable in a review package. To my delight, Flare 10 alleviates that shortcoming, and the actual snippet files come along for the ride.

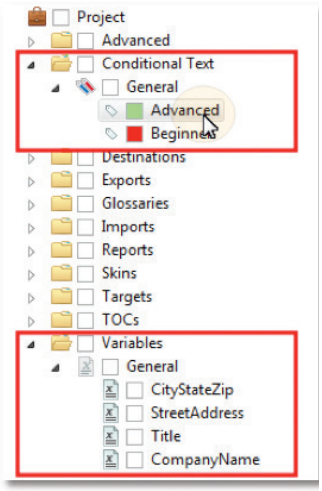
We can also choose a conditional build expression to hide content from reviewers, and we can have the review content show variables as defined for a specific target. Reviewers can see the exact content that will be present in generated output.

Scores of Other Enhancements

I've hit what I consider the "big gems" in Flare 10. Here's a quick rundown of smaller gems, but by no means a comprehensive list!

XML Editor enhancements. Flare users spend much of their time in the XML Editor, so any little touches to improve the experience are very welcome. Here are just a few:

- *Show or hide conditions while editing.* We used to have to preview a topic to see how it would look as conditioned for a given target. No more! Now we can show or hide conditioned content, either selectively or for a given target, as we edit. Very convenient.
- *Word count.* The word count for the open topic appears at the bottom left of the XML Editor. No more needing to output a topic to Microsoft Word to get the word count.



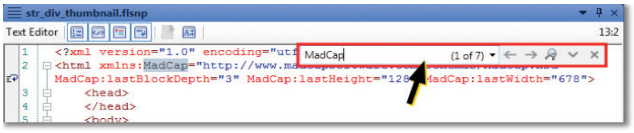
Conditions and variables can be applied by dragging from the Project Organizer

- *Move blocks with keyboard shortcuts.* Now we can move a selected block—*or blocks* (new in Flare 10)—up or down by pressing Alt+Shift+Up or Alt+Shift+Down. And this works for moving table rows up or down, too.

Drag & drop conditions and variables into the XML Editor, TOC Editor, and Browse Sequence Editor. Oh, thank you, MadCap! With Flare 10, we can drag a condition or variable from the Project Organizer right into these editors. For example, we quickly apply a condition by dragging it onto a structure bar, span bar, or image in the XML Editor, without having to have first selected that content.

List improvements. With Flare 10, we can create custom list formats up to 10 levels deep; these formats are written directly to the style sheet. No more having to edit style sheets by hand to create complex selectors to achieve the custom list formats. (Be sure to check out MadCap's warning in their documentation about browser support.)

Improved find-and-replace. The *Find in Files* and *Find and Replace* features have been replaced with a new, easier to use *Find and Replace in Files* feature that includes the ability to find whole words. Additionally, there are new *Quick Find* (Ctrl+F) and *Quick Replace* (Ctrl+H) widgets that act only on the topic, master page, or snippet currently being edited in the XML Editor (including its Text Editor and Split views), or any kind of file being edited in the Internal Text Editor.



Find widget

Character and line position in code. The Internal Text Editor's toolbar shows the character and line position of the cursor (as you can see in the image above). This is a tiny gem, but I'm sure it will be appreciated.

Locate a topic in the Content Explorer from the TOC. We can either right-click a TOC item or select it and click a new toolbar button to locate the TOC item's associated topic in the Content Explorer.

Stylesheet Editor enhancements. Flare 10's Stylesheet Editor lets us enhance our styles directly with effects that we used to have to code manually:

- *Create "before" and "after" pseudo styles.* With these, we can automatically have certain text appear before or after other content tagged with other styles.
- *Add comments.* Now we can easily add comments to our style sheets. I know I'll make use of this feature right away, given that many of the Flare projects I design are maintained by my clients' staff, many of whom avoid going "under the hood" into a style sheet.
- *Define rounded corners.* Now we can directly define rounded borders for blocks such as paragraphs and for tables (the latter in either the Stylesheet Editor or the TableStyle Editor).

Built-in support for Perforce. No more need to use an API to integrate Flare projects with Perforce for source control. Within Flare 10, we can bind our projects to Perforce and perform day-to-day source control operations such as check-ins and check-outs, diffs, and change history.

Import HTML files enhancements. In prior versions of Flare, we could import HTML files into an existing project, but we couldn't create a new project this way, the way that we could by importing Microsoft Word or Adobe FrameMaker documents. Flare 10 offers an Import HTML File Wizard with which we can select individual HTML files or entire folders to import, including files linked to the ones we explicitly select. As with other Import wizards, we can elect to link the Flare-generated files to the original source files, so if the source files are modified, Flare 10 will pick up the changes.

Compiler enhancements. Flare 10 separates build warnings from build errors, and we can direct it to ignore certain warnings (either globally or at the target-level). We can also set options to have Flare 10 always save the build log and launch the output after a successful build.

Insert multiple rows or columns in a table. In prior versions of Flare, we could insert a column or row only one at a time. In Flare 10, we can insert multiple columns or rows in one operation.

That's a Wrap

By the time this review is published, Flare 10 will be "in the can" and coming to a computer near you. When you finally get your hands on it, I suggest you read—thoroughly—the What's New material, and then play! I'm confident that you'll quickly assemble your own fangirl's or fanboy's cut of the best of MadCap Flare 10.

NITA BECK *(www.linkedin.com/in/nitabeck), the owner of Nita Beck Communications (http://beck-communications.com), is an MVP on the MadCap user forms, and is the founding member and manager of the Rochester Flare User Group. A longtime member of STC, Nita has presented many times at Spectrum, the annual conference of the STC Rochester Chapter. In 2013, she was a speaker at the inaugural MadWorld User Conference, and in April 2014 will return to MadWorld with sessions on using MadCap Flare with Apache Subversion, on techniques for speeding up the act of writing with Flare, and on best practices for the solo Flare author.*

2014 STC Election Results

STC, THE NOMINATING Committee, and the Board of Directors are pleased to announce the results of its 2014 election.

Voting concluded at 5:00 PM EDT (GMT-4) on 24 March. Of 4,111 eligible voters, 616 (14.98%) cast ballots.

Congratulations to the winners, and a special thanks to all candidates for their dedication to STC and willingness to devote their time and energy to improving our Society. Note: According to the STC Bylaws, the results become official when announced at the Annual Business Meeting at the STC Summit in Phoenix.

Kit Brown-Hoekstra

Bernard Aschwanden

President

Kit Brown-Hoekstra
(automatically succeeds from Vice President)

Vice President

Bernard Aschwanden*	336
Paul Mueller	274

Secretary

Alyssa Fox*	588

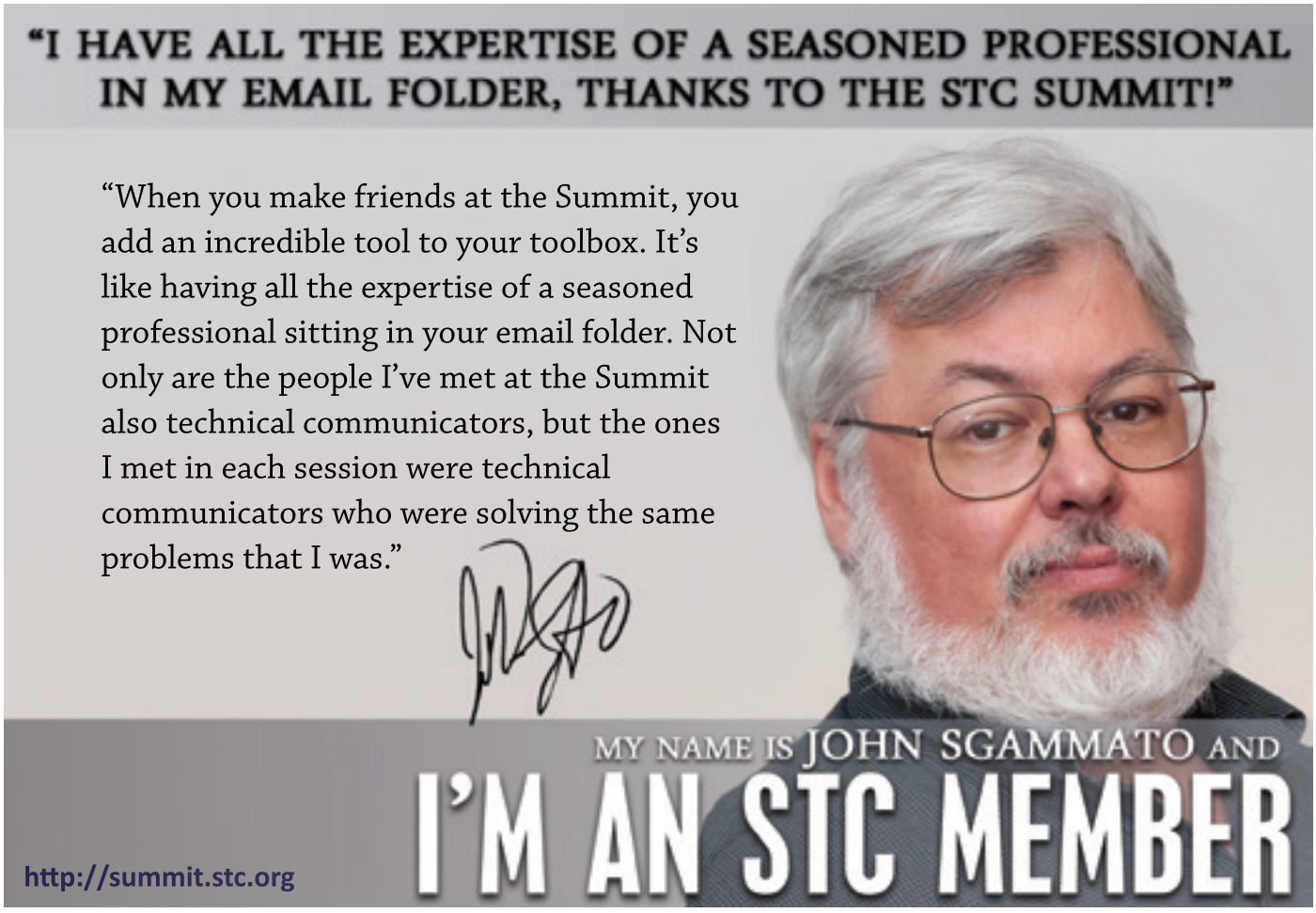
Director (two spots)

Ray Gallon*	467
Charles Fisher*	439
Makarand Pandit	270

Nominating Committee (two spots)

Donn DeBoard*	553
Marta Rauch*	590

** indicates winner.*


"I HAVE ALL THE EXPERTISE OF A SEASONED PROFESSIONAL IN MY EMAIL FOLDER, THANKS TO THE STC SUMMIT!"
"When you make friends at the Summit, you add an incredible tool to your toolbox. It's like having all the expertise of a seasoned professional sitting in your email folder. Not only are the people I've met at the Summit also technical communicators, but the ones I met in each session were technical communicators who were solving the same problems that I was."
MY NAME IS JOHN SGAMMATO AND
I'M AN STC MEMBER
http://summit.stc.org

Introducing the 2014 Summit Keynote Speaker: Jonathon Colman of Facebook

FOR OVER 15 YEARS, Jonathon Colman (*www.jonathoncolman.org*) has helped people and organizations build, find, and use the best stuff on the Web. As a member of the content strategy team at Facebook, Jonathon works with product designers, UX researchers, engineers, and product managers to make Facebook better, easier to use, and more delightful for over one billion people around the world . . . including people just like you.

Jonathon has worked with organizations like Facebook, REI, The Nature Conservancy, Conservation International, and IBM to connect with their communities, engage their members, and launch new products and experiences. He helped lead a team that won two Webby Awards for The Nature Conservancy in 2009.

"Jonathon offers a fresh outlook on content and communication, and I'm thrilled he is joining us this year," stated Conference Chair Chris Hester. "He has roots in technical communication, so he understands where we've been as a profession, as well as where we're headed. And that's what he'll be talking about in Phoenix: the future of content strategy. In our earliest conversations about the Summit, he shared his thoughts on this topic, leaving me with ideas that I would mull over for days. The more we talked, the more our chats left me convinced he would be a great keynote speaker: he's a positive and engaging guy, but he's also someone who motivates you to explore new ways of thinking. I'm looking forward to seeing him in Phoenix!"

Jonathon has spoken at international conferences on content strategy, user experience, Internet marketing, and other topics. He's had the honor of presenting at Confab, the IA Summit, ad:Tech, eTail, the Content Strategy Forum, the National Press Club, and many more. His keynote at the Summit will be on the topic of "Information Entropy: The Next 10,000 Years of Content Strategy" (see sidebar).

"I'm so excited to come back to STC, which I joined in college while studying technical writing," Jonathon said. "I started out writing books for IBM in SGML, sometimes hand-coding the markup to make it work for the printers. And it was my local community of technical writers who helped me learn the craft and overcome technical hurdles. And so much has changed over the past two decades! I'm fascinated by your work and eager to continue learning from you at the Summit."

Jonathon also served as a Peace Corps Volunteer in Burkina Faso, West Africa, where he worked on rural public health issues and honed his technical communication skills in three languages from 1999–2000. Jonathon recently earned a master's degree from the University of Washington's information management program. Previously, he graduated from Michigan Technological University with a degree in scientific and technical communication in 1997.

Jonathon is powered by coffee and believes that not all those who wander are lost. You can find Jonathon on Facebook at *www.facebook.com/jcolman* or follow him on Twitter *@jcolman*. And join him at the STC Summit from 18–21 May. Register today!

Information Entropy: The Next 10,000 Years of Content Strategy

As content strategists, UX professionals, and technical communicators, much of our work is focused on solving problems for real people with defined needs and contexts who live and work in the here and now. We take a holistic approach, break down silos within our organizations, and iteratively create real value for the people who use our products and services.

But how does our work change—and how must we adapt our approaches and strategies—when we're planning for projects that last for not one year, or even 10 years, but for 10,000 years or more?

Using real-world examples from NASA's Voyager program, the Yucca Mountain Nuclear Waste repository, and other long-term projects, Jonathon will talk about the challenges of creating information that degrades elegantly over space and time—information that's still useful, usable, accessible, and meaningful for people whom we'll never know in our lifetimes.

The answers to these problems give us a new perspective on our work, on the natures of clarity and simplicity, and on what it means to build a brand that endures with messages that last.

2014 Technical Communication Summit Conference-at-a-Glance (18–21 May 2014, Phoenix, Arizona)

	Saturday, 17 May	Sunday, 18 May		Monday, 19 May		Tuesday, 20 May		Wednesday, 21 May
8:00 AM	8:00–5:00 Preconference Certificate Sessions and Workshops (optional pricing)	8:00–12:30 Leadership Program (preregister; optional pricing)	8:00–5:00 Preconference Certificate Sessions and Workshops (optional pricing)		8:30–10:30 Education Sessions		8:30–10:30 Education Sessions	8:30–12:30 Education Sessions
9:00 AM				9:00–5:00 Expo Open		9:00–5:00 Expo Open		
10:00 AM							10:30–1:00 Break. Visit the Expo Hall!	
11:00 AM					11:00–12:30 Communities Event. Visit the Exhibit Hall!			
Noon								12:30–2:00 CLOSING LUNCHEON (ticket required)
1:00 PM					1:00–4:15 Education Sessions		1:00–5:00 Education Sessions	
2:00 PM								
3:00 PM								
4:00 PM								
5:00 PM				5:00–6:00 Annual Business Meeting				
6:00 PM		5:30–6:45 OPENING KEYNOTE GENERAL SESSION						
7:00 PM		7:00–8:30 Expo Ribbon Cutting & Welcome Reception in the Exhibit Hall				7:00–7:30 HONORS RECEPTION (free)		
8:00 PM						7:30–10:30 HONORS BANQUET (ticket required)		

Join Technical Communicators from Around the Globe at the STC Summit

THIS MAY IN Phoenix, AZ, STC will host one of the largest gatherings of technical communicators. More than 80 education and networking sessions will be presented from Sunday evening to Wednesday afternoon, 18–21 May, kicked off by keynote speaker Jonathon Colman of Facebook on 18 May. Top practitioners, academe, consultants, and researchers in the field of technical communication will present new material on cutting-edge technology, trends, and issues, mixed in with the staples of solid communication techniques and topic areas. And once again, STC has solved the dilemma of wanting to be in two places at once to benefit from all of the quality presentations.

STC's conference website (*http://summit.stc.org*) allows members to directly access information about the education sessions through *Lanyard.com*, which is updated regularly. Education sessions cover a wide variety of topics and are organized into eight tracks: content development and delivery; content strategy and design; mobile content design and development; user experience and accessibility; people and project management; business management and consulting; professional development; and academic research and topics. The site also contains details on the content of preconference workshops and certificate sessions.

Conference Overview

- Conference begins Sunday evening with a talk by keynote speaker Jonathon Colman and reception in Expo Hall
- More than 80 sessions, organized by seven tracks
- Registration includes two receptions, plus morning and afternoon refreshment breaks
- Captured content (SUMMIT@aClick) included in registration fee
- Job Bank in Expo Hall
- The return of the bookstore
- Top exhibitors and vendor showcases
- Preconference events include certificate sessions and workshops (optional fee required)

The Summit also includes our vendor Expo, with dozens of companies represented. Summit registration includes two receptions (Opening Reception and Communities Event) plus morning and afternoon refreshment breaks in the exhibit hall. Also in the exhibit hall is the return of the bookstore!

One of the major added benefits of conference registration is post-conference access to STC's Summit@aClick. This unique feature provides audio/graphic synchronized recordings of almost all the sessions. Summit@aClick takes away the problem of only being able to attend one session per hour. You can benefit from all of the education and information available at the Summit by listening and watching the other sessions on Summit@aClick after you get home. **STC's Summit is the only meeting in the technical communication field that offers this added bonus.**

"The ability to 'attend' the sessions you missed is invaluable," stated Lloyd Tucker, STC's director of meetings and education. "You can review sessions you attended for a refresher, or check out additional sessions for 'just in time' training—for yourself *and* for others in your company." This helps provide a greater return on investment for attendees and their organization or department.

All of these education sessions and SUMMIT@aClick bring greater value to conference attendees. STC continues to work hard to keep attendees' costs down, including lower hotel expenses. The conference hotel, the Hyatt Regency, has a rate of $164 per night, which includes free in-room Internet access for all those registering with the STC block. And the Early Bird rate (good through 31 March) for conference registration for members is $260 less than nonmembers (which would even cover the cost of your Classic membership dues).

To assist those who must request funding from their employer to register and attend the conference, STC has created a sample memo and executive summary that can be used to emphasize the necessity and benefit of attending the Technical Communication Summit. See the "Program Info" tab on *http://summit.stc.org*.

Members looking for work will find a fertile field at the 2014 Technical Communication Summit, too! With myriad resources onsite, education sessions, and the advantages of networking among the best and brightest of technical communicators, the annual conference is the best place for job hunters to be—there are job postings onsite, numerous opportunities for networking, updates on industry trends, new software announcements, and everything needed to stay ahead of the game.

Savvy technical communicators know that STC is their professional home and that the annual conference is the best resource to advance their career. Register for the 2014 Technical Communication Summit online at *http://summit.stc.org/*, and reap all the benefits.

Session Schedule and Types of Sessions at the Summit

THE FULL SCHEDULE of sessions for the 2014 Summit (18–21 May in Phoenix, AZ) is now available by date and time. Visit *http://summit.stc.org/program-info/program-overview* to start planning your days in Phoenix.

Especially for first-time attendees, you might not know what to expect at the Technical Communication Summit. First off, *all* Summit education sessions are included with your registration, and you do not need to RSVP for individual sessions. There are a small number of preconference courses and workshops on Saturday and Sunday that require additional fees and registration, but all attendees at the Summit are welcome to attend any session desired from Monday through Wednesday, plus the Sunday evening Opening General Session and Welcome Reception.

There are four basic types of sessions, described below. Familiarize yourself with the sessions and be ready to decide which ones are right for you!

Presentations (45 minutes)

Presentations provide attendees an overview of the title topic. A presentation can be a case study, research report, demonstration, or informational session about a topic of interest. Presentations usually include slides and/or handouts, and many presenters offer audience participation or a Q&A at the end.

Progressions (20 minutes)

A progression topic uses a discussion format to facilitate the sharing of ideas and experience around a specific approach or topic. During a 45-minute session, up to 6 speakers will be grouped together into one progression on related topics. Each speaker will be seated at a different round table in the room. Participants will select two tables to attend during the session.

Spotlights (20 minutes)

This new format allows speakers to share a powerful message or story in a short time to a large audience. The Summit will offer three spotlight sessions at the same time, in different rooms, on the last day of the Summit. These sessions will be in larger rooms, accommodating up to 300 attendees in each session. After 20 minutes, a short break will be provided so attendees can change rooms, if desired.

Lightning Talks (5 minutes)

These 5-minute talks are on interesting and thought-provoking topics of interest to technical communicators—and entertaining, too! Each speaker has 20 slides, automatically displayed at 15 seconds per slide.

Student Poster Session

In addition, the results of the 2014 Student Poster Competition will be displayed in Phoenix. The STC Academic SIG invited individual and team submissions to a student poster competition for the 2014 Summit. Both undergraduate and graduate students were invited to submit innovative work in communicating technical content, managing a technical communication group, producing and publishing content, researching content, or promoting the profession. Selected posters will be displayed at the Summit and the top three winners will be honored at the Honors Banquet on Tuesday, 20 May.

Getting To and Around Phoenix

BY CHANDA CHILD

ARE YOU ATTENDING the 2014 Summit in Phoenix? Read this article to learn about our airports and the public transportation options that can save you the expense of renting an automobile or taking taxis.

Phoenix Sky Harbor International Airport

Phoenix Sky Harbor International Airport (PHX), located near downtown Phoenix, is Arizona's largest airport and serves major domestic and international airlines. Visit *http://skyharbor.com* to learn about the airport, transportation to and from downtown Phoenix, its history, and its art exhibits. You'll also find a map for each terminal that shows the concourses, gates, restaurants, and shops.

While you're at Sky Harbor, enjoy the Phoenix Airport Museum art exhibits. You'll find them in all three terminals, at the rental car center, and at the PHX Sky Train stations. The exhibits are free and most are outside security.

If you find yourself in Terminal 4, you're in for a treat. Many of the restaurants in the terminal are now some of the area's most loved local ones. You'll find local restaurants serving hamburgers, Mexican food, southwestern food, and pizza. But don't worry—there are still some national restaurants. You won't have to go without Starbucks coffee!

Phoenix-Mesa Gateway Airport

You can also fly to Phoenix-Mesa Gateway Airport (AZA). Gateway is located approximately 30 miles southeast of downtown Phoenix. Currently, the only airline that flies into Gateway is Allegiant Air. It flies from many small U.S. cities

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Valley METRO Light Rail Station at Third and Washington Streets

© Kerrick James/Greater Phoenix CVB

PHX Sky Train Crossing 90 feet above an active taxiway

in the Midwest and West. Visit *www.phxmesagateway.org* to learn about the airport, Allegiant Air destinations, and transportation to and from downtown Phoenix.

Transportation to Downtown Phoenix

If you arrive at Sky Harbor Terminal 2 or 3, take the free PHX Airport Shuttle to Terminal 4. From Terminal 4, take the free PHX Sky Train to the Valley METRO Light Rail station at 44th and Washington Streets. Board the westbound train for $2 and ride to the station at Third and Washington streets. The Hyatt Regency and Phoenix Convention Center West are less than a quarter-mile walk from the station. Visit *http://skyharbor.com/pdf/TransGuide_Hotels.pdf* to download a map and directions. Note that page 1 contains out-of-date information. When you return to Sky Harbor, board the eastbound train at Third and Jefferson Streets.

From Gateway Airport, there are several ways to travel to downtown Phoenix. The easiest may be to take the Inter Airport Shuttle for $24 to Sky Harbor Airport, followed by the Valley METRO Light Rail to downtown Phoenix. If you're adventurous, consider planning a route using Valley METRO buses to get to the Valley METRO Light Rail station at Sycamore and Main streets in Mesa. Visit *www.phxmesagateway.org/TaxisShuttlesAndBuses.aspx* for a list of transportation options and contact information.

PHX Airport Shuttle

The PHX Airport Shuttle runs 24 hours a day, seven days a week between the Sky Harbor Airport terminals. Visit *http://skyharbor.com/transportationparking/shuttledirections.html* to learn how to use the shuttle to travel from Terminal 2 or 3 to Terminal 4, where you can connect to the PHX Sky Train. You can download a printable card that provides instructions for transferring between terminals.

PHX Sky Train

The PHX Sky Train also runs 24/7 between Sky Harbor Terminal 4 and the Valley METRO Light Rail station at 44th and Washington streets. You can board the train from two locations on Level 3 in Terminal 4—west of the C gates or east of the D gates. Visit *http://skyharbor.com/PHXSkyTrain* to learn more.

Valley METRO Light Rail

Light Rail trains run between Phoenix and Mesa about 20 hours a day, seven days a week. Take a train east to explore Tempe and Arizona State University or north along Central Avenue to Phoenix museums, restaurants, bars, and coffee shops. Visit *http://routes.valleymetro.org/timetables/785/transit_route?type=1* to view the schedule and route map. To see maps showing places of interest within walking distance of the light rail stations, use your favorite search engine and search for Phoenix Light Rail.

As you travel the Light Rail, look at the artwork at each station. Visit *www.valleymetro.org/images/uploads/misc_reports/METRO-Art-Book.pdf* for photographs and descriptions of the artwork.

Arizona Pedal Cab

If you see an Arizona Pedal Cab, hail it for a ride. The cost of shuttle service is a fair tip for the driver. You can also call the company 15 minutes ahead for a ride when you see the cabs on the street. Visit *www.azpedicab.com/shuttle.html* for the telephone number to call.

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Arizona Pedal Cab

Network, Network, Network! The Hidden Benefit of the Summit

WHILE THE EDUCATION sessions are more than enough to lure you to Phoenix for the 2014 Technical Communication Summit, the "hidden benefit" of the event is surely the networking. With hundreds of the top technical communicators from around the world converging in one location, it's an amazing opportunity to meet new people and perhaps advance your career. Here's a summary of the networking events in Phoenix that can add even more value to your registration.

Opening General Session

The Opening General Session is what kicks the whole party off on Sunday evening. Highlighted by the keynote address of Jonathon Colman, the Opening General Session puts everyone together in one big room. Talk to your neighbor and introduce yourself!

Welcome Reception

Immediately following the Opening General Session is the Welcome Reception, taking place in the exhibit hall. Find out about the latest advances from top vendors in the industry, and grab some free food while you're at it! There's a cash bar as well, plus many vendors have drawings for prizes in the Expo.

Communities Event

During the break between education sessions on Monday, check out the Communities Event in the Expo, with light refreshments. Learn more about STC's Special Interest Groups and network with your fellow attendees.

Honors Reception and Banquet

The Honors Reception and Banquet is the highlight of the event for many. The banquet honors the brightest stars of technical communication, spotlighting the Society's newest Fellows, Associate Fellows, and award winners. There's an extra fee to attend the banquet (note: you must purchase your ticket by noon on Monday, 19 May, to attend), but the reception—with cash bar—is open to all.

Closing Luncheon

The Closing Luncheon is one last opportunity to talk with old and new friends when the sessions end on Wednesday. This buffet lunch lets you sit down with new friends and colleagues, make sure you've exchanged contact information, and even learn a bit about the 2015 Summit! (Note: you must purchase your ticket by noon on Tuesday, 20 May, to attend.)

SIG Meetings

Many of STC's Special Interest Groups (SIGs) schedule business meetings during the Summit. These meetings are scheduled for Tuesday during the lunch break. See the conference program for the full schedule.

Coffee Breaks

There will be multiple coffee breaks in the Expo on Monday and Tuesday, and in the registration area on Wednesday. Grab a cup and talk about what you've learned at the Summit. See the conference program for the full schedule.

Optional Tourist Events

What better way to get to know your fellow attendee than by playing tourist together? The STC Phoenix Chapter has organized multiple tourist events for attendees, including trips to the Arizona Science Center and Phoenix Art Museum, plus a special showing of the documentary *Helvetica*. You must register for these events in advance; see *http://summit.stc.org/hotel-travel/optional-tourist-events/* for full details.

Tweet-Ups

Every year, attendees organize "tweet-ups" at a local bar or restaurant—dinner, karaoke, drinks, etc. Keep an eye on Twitter during the conference for these fun evening events.

Hallways, Bars, and Restaurants

Sometimes the best networking can be just bumping into another attendee and starting a conversation. Many attendees frequent the hotel bars and restaurants in the evening (another good reason to stay at the official conference hotel!), and there's almost always a group in the lobby looking for dinner partners. Follow *#stc14* on Twitter, too, for impromptu invitations and gatherings.

Meeting Rooms

Finally, the meeting rooms are a great place to start a conversation (though not during the sessions, please). Since you're both in the same session, you know you have at least one interest in common—see what other interests you share and if you might be able to help each other out. One attendee reports striking up a conversation with the person next to her and having it result in an ongoing freelance contract!

You never know where your next job might come from, who might be able to help you out of your next jam, or who you might be able to lend a hand or an ear to next month. Take advantage of the networking opportunities available at the 2014 Technical Communication Summit.

How to Teach Career Planning: Beyond the Next Job

www.shutterstock.com/ Ambrophoto

BY THOMAS BARKER | *Fellow*

TECHNICAL COMMUNICATION ACADEMICS use research to uncover the underlying principles of writing style, audience analysis, and document design, and to teach those underlying principles. Not satisfied with simple facts that a design works or not, they ask why it works. What psychological mechanisms, for example, in a risk message can turn a reader from being risk prone to being risk averse, and maybe safer on the job site? The same holds for the topic of this column of The Academic Conversation. What are the dynamics that drive a successful technical communication career? In it, we look below the surface of job markets, interview techniques, and other concerns, and examine the changing job markets, professional networking, and other long-term dynamics of planning a successful career.

A Student's Dilemma

This is not to say that interview skills, job-searching techniques, and résumé construction are not important. They are fundamental to landing the next job after graduation, and the one after that. But to illustrate what I mean, let me examine a conversation I had with a soon-to-be graduate in a technical communication masters program. In this example, Mason Rizzo has experience as a graduate research assistant in a university setting. I employ these assistants myself and can attest to the great work they do as communicators. Mason's questions fell into three categories: perception of job roles, culture, and long-term career planning.

How will my job skills look in a variety of settings? "While I believe I have obtained the *skills* necessary to excel as a technical writer," he says, "I'm nervous of the *perception* people might have of me." How can skills as a research assistant map onto the skills needed in positions that you would more readily associate with technical writing? Here the issue is a matter of a student needing to see core skills across domains.

Another question Mason had was about culture. "I'm used to a partnership of writing teams and engineering teams on my present job. How will that fit in with workplace engineering cultures that might not value technical writing as much? Will I be prepared culturally?" Clearly students need to see not just the culture of technical communicators, but also appreciate intercultural aspects of employment and skill translation.

This column focuses on a broad range of practical academic issues from teaching and training to professional concerns, research, and technologies of interest to teachers, students, and researchers. Please send comments and suggestions to *ttbarker@ualberta.ca* or the column blog at *http://theacademicconversation.ning.com/*.

What can we do to prepare students for long-term career planning?

These two questions lead logically to issues about starting "an edifying career." Mason already has his "next job" lined up, but it's as a public relations consultant in a small marketing firm. This contingency plan leaves him questioning his future: "I quit a really great research assistant job for an undesirable position doing something that I don't enjoy and, more importantly, being in a position that does not employ my skills as a writer." Rightly, he is scared that this will end up as a "keep-me-busy" job but not the stepping stone to a career.

These questions about perception, about culture, and about career transitions suggest that our graduates need help beyond just *getting the next job*. As a first step, we should ask what employers want from our graduates.

What Employers Want

A 2013 study of 318 employers done by Hart Research Associates emphasizes innovation as a priority for employers. "Innovation is essential," say 95% of respondents. Likewise employers value critical thinking, judgment, integrity, and problem solving in real-world environments—skills we teach in our courses. We see these competencies reflected in Mason's questions about skill transferability and culture. However, a surprising find of the Hart study was this: "Two in three employers (67%) believe that most college graduates have the skills and knowledge they need to succeed in entry-level positions, but only 44% think they have what is required for advancement and promotion to higher levels." This last finding points to the broader concern we saw in Mason's last challenge: he needed more than the next job skills, but a planning agenda for careers.

To answer this challenge, I asked some colleagues how they addressed career planning in their programs.

Help Students Plan for Job Diversity

A fact of life in technical communication that many academics might not see is the bewildering diversity of positions and career paths that face our students. I asked Dr. Steven Bernhardt, at the University of Delaware, what he thought the main change was in the employment picture for students today, compared to, say, 10 years ago. " I think the major change," said Bernhardt, "is increased unpredictability. It's very hard to set a clear target job. We think many of our students are placing well, some exceptionally so, but they are going in many directions and there is no clear path." Faculty members have always urged students to consider the relevance of technical communication skills in a variety of contexts, but today the message may need more emphasis.

One way to do this, suggests STC Vice President Kit Brown-Hoekstra, is to use skills mapping for students.

www.shutterstock.com/ Pressmaster

Skills mapping helps them see beyond the next job so they can plan long-term for careers. She points to an infographic created by Red Gate Software and reprinted here in Brian Harris's article on page 6. The skills map begins with core skills (in the center) and plots career development on four axes: specialization, product/domain emphasis, leadership, and project development. Skills beyond the traditional core, achieved over time and experience, can lead to a career trajectory model for students, rather than a "next job" focus.

Figure 1. LinkedIn Network Visualization

Use Contact with Alumni

One way to bring the long-term perspective into the classroom is by contact with alumni. I had a conversation with a graduate of our program who felt the need for communication over time and beyond the classroom. He expressed feeling "disappointed with the lack of communication from former faculty." And it is a two-way street: alumni enjoy continued advice and mentoring from faculty members, who benefit by tracking graduate's career pathways. If students become members, then the Academic SIG of STC can help them keep in touch. Dr. Kathy Northcut, at Missouri University of Science and Technology, uses even more aggressive tactics. "Our department chair has held several alumni career panels. They're fascinating because we have both English and tech comm degree programs, and you never know who will end up where, doing what. The students have appreciated that event, and last year we filled the room." Career panels like this one help students gain a long-term prospective on their careers. Other ways to involve alumni are in award review panels, e-portfolio reviews, and program advisory panels.

Helping Students Prepare Networks

Increasingly, academics are preparing students to use a network perspective. The website *monster.com* can help a student find a job, but a connection through professional networking sites like Linkedin can help a student understand the need for a personal learning network. This can help students overcome anxiety over the decay of the degree's relevance and the obsolescence of job training. Dr. Joe Moses, assistant director of graduate studies at the University of Minnesota, engages students in discussions and activities that support the building of personal learning networks. According to Moses, "students use a variety of tools for connecting with other students, thought leaders, industry participants, and others to support life-long learning in the technical communication field. By integrating digital media theory and practice into coursework and asking students to think critically about where, when, and how they learn, we build bridges between institutional and organizational cultures."

Linkedin, as you can see from the Figure 1, allows readers to create conceptually and visually interesting graphic representations of personal learning networks. These can help students see the importance of creating and maintaining long-term connections.

Use Professional Organizations

Professional organizations, such as STC and its Special Interest Groups (SIGs), the User Experience Professionals Association (UXPA), the Professional Writers Association of Canada (PWAC), and others offer networking and long-term connections that can help students plan long and varied careers. STC's Technical Communication Body of Knowledge (*http://stcbok.editme.com/*) has a section on "Careers" and "Professional Development." Here students get a good overview of what professional development is and how they can manage their resources to build a long-term career perspective. The advice in this section is that "throughout their careers, technical communicators must keep pace with—and often contribute to—evolving academic theory and scholarship."

Career planning, as we have seen, can compliment the usual work we do to prepare students with resumes, interview skills, and job resources. Planning can use available resources such as alumni networks and professional organizations to help students see beyond the "next job" to a rich and varied career as a technical communicator. i

RESOURCES

Pratt, Ellis. Letter from the UK: Red Gate Software's Technical Communication Skills Map. *STC's Notebook* blog, 15 October 2013, *http://notebook.stc.org/letter-from-the-uk-red-gate-softwares-technical-communication-skills-map/.*

Hart Research Associates (2013). It Takes More Than a Major: Employer Priorities for College Learning and Student Success: An Online Survey Among Employers Conducted on Behalf of the Association of American Colleges and Universities, *www.aacu.org/leap/documents/2013_EmployerSurvey.pdf.*

Responsive Design

BY NICKY BLEIEL | *Senior Member*

RESPONSIVE DESIGN MAKES it possible for our content to adapt to any device. This means that technical communicators no longer need to spend time designing and creating deliverables for different devices, we can instead focus on developing and delivering high-quality content. Responsive design gives us the opportunity to create once and deliver to thousands of devices: new ones, older ones, and ones that don't even exist yet.

Here are several reasons why the timing is right for responsive design:

- Mashable declared 2013 the "Year of Responsive Web Design" (*http://mashable.com/2012/12/11/responsive-web-design/*) and SlashGear reported the forecast for sales of smartphones and tablets will outpace PCs through 2017 (*www.slashgear.com/tablet-shipments-to-outpace-total-pc-shipments-in-q4-2013-says-idc-12297574/*).
- Google changed its algorithm to favor responsive content *(www.smartinsights.com/search-engine-optimisation-seo/mobile-seo/googles-changing-recommendations-on-seo-for-mobile/)*.
- Mobile users want everything that desktop users have—they expect "content parity" (*http://bradfrostweb.com/blog/mobile/content-parity/*).
- A single responsive output makes supporting a continuous publishing model easier, because we no longer need to build and maintain "Web" and "mobile Web" versions.
- The usability of our content will be improved because we won't be confusing users with different experiences on different devices. Google has found that sequential and simultaneous usage of different devices is the norm (*http://services.google.com/fh/files/misc/multiscreenworld_final.pdf*).

An Extremely Short Primer on Responsive Design

Responsive Web design is a technique for designing Web pages that automatically adjust to the device accessing them. A variety of technologies are used, the core ones being media queries, fluid layouts, and flexible images. In addition to HTML and CSS, jQuery, JavaScript, and sometimes PHP are used to create responsive designs. The HTML code of the page never changes, but its presentation adjusts based on the CSS rules specified for the device/browser. No content is lost in responsive design; the content and the page layout simply adjust by stacking or collapsing. (There is no horizontal scrollbar.) Responsive design has another component; it is touch-enabled. This is technically an adaptive design element, but it is necessary to be truly responsive.

A great example of a "stacking" responsive website is *www.microsoft.com* and a blog post that explains how it works: *http://moz.com/blog/seo-of-responsive-web-design*. And here is an example of responsive content that adapts by collapsing: *http://showme.doctohelp.com/WidgetExplorer/Documents/Welcome.htm*.

Understanding the power of responsive design and how it works is important, but it may not be necessary for technical communicators to code responsive outputs ourselves. We should consider using help authoring tools that give us the option to customize and build responsive outputs. If we do that instead of coding, we can concentrate our efforts on optimizing our content.

"Mobile First" Best Practices for Technical Communicators

Creating responsive outputs means that technical communicators need to adopt a "mobile first" mindset—our content needs to be designed to work well on mobile (or smaller) screens, because when you write or make other changes for mobile, then the content will work well on tablets, the desktop, etc.

A few "mobile first" best practices:

Keep image files small. Large files will increase load time, which is something mobile users have no patience for; in fact, 74% of mobile users will leave a website that takes more than five seconds to load (*www.sitepoint.com/4-common-responsive-web-design-pitfalls/*).

Use concise writing (already a good best practice). This isn't just about screen size; those working on smaller devices have less patience to wade through content. (A tertiary benefit is the reduction of translation costs.)

Employ progressive information disclosure. This will make information easier to find and puts the choice to learn more in the hands of the reader.

Improve navigation. Add related links at the end of topics so no one needs to use the device's "back" button, because that makes it is easier to navigate away from your content.

Make links easier to use. Don't bury too many links in the same paragraph because they will be harder to use on mobile devices.

Streamline your hierarchies. A table of contents that is four to five levels deep is more challenging to navigate on mobile devices. Avoid sublevel bullets and numbering. It is harder to see the relationships between levels on smaller devices.

Clean up your terminology. Your content needs to work on devices where you tap *and* those where you click. Avoid using device-specific terms.

Excellent resources to learn more about responsive Web design: *Responsive Web Design* by Ethan Marcotte and *Implementing Responsive Design* by Tim Kadlec.

This column is a quick reference guide exploring "essential" technical communication topics. Please send questions or comments to Nicky Bleiel at *nickyb@componentone.com*. Follow her on Twitter: *@nickybleiel*.

Mark Your Calendar

Organization events across the globe

F.Y.I. lists information about nonprofit ventures only. Please send information to *intercom@stc.org.*

1 22 Mar
The 2014 Mid-Atlantic Technical Communication Conference and Workshops, hosted by the **STC Philadelphia Metro Chapter**, takes place 22 March at the Giant Conference Center in Willow Grove, PA. For more information, please contact:
STC-PMC
www.stcpmc.org/conference

2 25–30 Mar
The **American Society for Information Science and Technology (ASIS&T)** will hold the IA Summit in San Diego, CA. For more information, contact:
ASIS&T
asis@asis.org
http://2014.iasummit.org/

3 29–30 Mar
The **STC New England Chapter** hosts the annual InterChange conference on 29–30 March at the UMass Lowell Conference Center in Lowell, MA. For more information, please contact:
STC New England
interchange@stcnewengland.org
www.stcnewengland.org

4 2–6 Apr
The **Association of Independent Information Professionals (AIIP)** holds its annual conference from 2–6 April at the Hyatt Regency Baltimore in Baltimore, MD. For more information, contact:
AIIP
http://aiip.org/discover/conference

5 13–15 Apr
The **STC Rochester Chapter** hosts Spectrum 2014, with a theme of "Communicating to Understand: Core Competency, Core Value," from 13–15 April at the Rochester Institute of Technology. For more information, please contact:
STC Rochester
http://spectrum.stc-rochester.org

6 13–16 Apr
The **International Society for Performance Improvement (ISPI)** will hold its Performance Improvement Conference in Indianapolis, IN. For more information, contact:
ISPI
+1 (301) 587-8570
conference@ispi.org
www.ispi.org/AC2014

7 30 Apr–3 May
The **American Society for Indexing (ASI)** will be holding its annual conference in Charleston, SC. For more information, contact:
ASI
conference@asindexing.org
www.asindexing.org/

8 18–21 May
The **Society for Technical Communication** hosts the Technical Communication Summit at the Hyatt Regency Phoenix and Phoenix Convention Center in Phoenix, AZ. For more information, contact:
STC
+1 (703) 522-4114
http://summit.stc.org

* STC-related event

Life as a Project Manager

BY LIZ ROSCOVIUS | *Member*

IT'S 10:00 AM on a Friday and my phone rings. It's our largest client and they need a new document written, reviewed, and released by end-of-day. Can I help?

Of course I can. I'm a project manager.

Don't get me wrong—I'm not a miracle worker, but I *do* work with several. It is only with the support of a great team that I—or any project manager—come close to doing so.

What is a project manager? According to some experts, the role of a project manager is, at a high level, to plan, execute, and finalize projects on schedule and within budget. This includes assigning resources and coordinating the efforts of team members, both internal and external, in order to deliver high-quality products that meet specific needs and requirements, comply with standards, address limitations, and respect business goals. It means tracking project milestones and providing status updates. It means proactively managing changes in project scope, identifying potential crises, and devising appropriate contingency plans to resolve issues and solve problems.

In the field of technical communication, many project managers also help define project scope and objectives and oversee quality control. They often act as a mediator between stakeholders and team members. On the client side, they build, develop, and grow business relationships. On the development side, they coach, supervise, and motivate team members to take positive action and be accountable for their assigned work.

In short, a project manager often plays the role of air-traffic controller, hostage negotiator, and den mother, all rolled up into one.

Air-traffic Controller

To many clients, schedule is everything. If, like my team, you develop a thousand or more documents per year for multiple clients around the world, you know what this means. Not all project requests are clear or complete, nor are they prioritized, so it's frequently the project manager's job to collect missing information and set priorities before assembling the team best suited to deliver. When everything's a "rush," this can present a real challenge.

Add international stakeholders, manufacturers, and team members, and the number of variables impacting success increases. Supporting global communication needs means more than working across varied time zones. You must understand and respect cultural differences because they often impact project scope and objectives. Simply defining appropriate translations can add time and complexity to an already tight schedule.

Hostage Negotiator

Poor communication can impact quality as well. While many clients might share similar project needs, many also have unique ones but fail to communicate those clearly, particularly in a rush situation. This means the project manager must have sharp listening skills and ask the right questions. She must be able to interpret what people really want, understanding that what they *don't* say might be more important than what they *do* say.

Sometimes, words conflict with actions. For example, most clients like the idea of language edits, usability reviews, and professional translation because they know those improve overall customer experience. They may, however, balk at cost. Similarly, many technical reviewers say they want accurate and easy-to-understand documentation but resist putting effort into providing proper feedback. If, like my team, you have no product sample against which to verify content, this is critical. Project managers must gently, yet firmly, help stakeholders understand why every element is necessary and how they can contribute to overall doc quality.

Den Mother

From stakeholders to team members, project managers work with very different people. All can impact project quality, so it's important that project managers understand and manage varied personalities effectively. Many clients, for example, have a general misunderstanding about what technical communication entails. The notion that content developers are somehow mind readers is, of course, ludicrous, and yet it exists, whether recognized or not. For a project to succeed, the project manager must educate clients to help set proper expectations.

At a project level, qualifications and availability must be balanced in a way that doesn't compromise quality. Whether a team requires contractors or not, the project manager needs to know who has what skill sets and who is best suited to deliver.

Yes, a project manager's job can be challenging, sometimes even frustrating. At the same time, it can be rewarding. When, at the end of a long, complex project, a client says employees liked a training guide, that promotional materials effectively promoted a product, or that a user manual helped reduce support calls and returns, it's worth the effort.

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